



NEW ZEALAND
Sustainable
AQUACULTURE

2021 SUSTAINABILITY
REPORT





INTRODUCTION

Welcome to the 2021 A+ Sustainability Report. Since launching the A+ Sustainable Management Framework in 2015, several improvements have been made to the programme. Aquaculture New Zealand (AQNZ) has refined the A+ checklist, improved the farming database with increased accuracy, produced scoring reports for every grower, and built industry engagement so we now have almost every marine farmer in New Zealand committed to the A+ Programme.

The 2021 A+ Sustainability Report provides all stakeholders, including industry, councils, Iwi, community groups and others, an overview of our achievements from the A+ Programme for the 2020 calendar year, other complementary environmental initiatives underway, and outlines the next steps we are taking on our sustainable aquaculture journey.

EXECUTIVE SUMMARY

Every year, the engagement in the New Zealand aquaculture industry's Sustainable Management Framework, the A+ Programme, grows. A+ is proving to be an effective tool to help industry measure and improve environmental performance, providing a platform for the New Zealand public and our international markets to have confidence that our premium seafood is carefully, responsibly, and ethically produced.

The 2021 A+ Sustainability Report provides an overview of our achievements in 2020, key findings from the independent verification, and recommendations for improvements. The aquaculture industry has a strong commitment to kaitiakitanga (guardianship) - we respect our environment, our neighbours, and communities. The A+ Programme formalises the best practice standards we are employing to minimise our environmental footprint.

Third party independent assessment ensures the programme has integrity and transparency. Consistent feedback from the verification assessments is that although the A+ Programme *"is an excellent continuous improvement programme providing a steppingstone to global best practice"*, companies should work on improving the objective evidence they have to demonstrate they are operating at global best practice, such as a greater level of documented systems, procedures, plans, record keeping forms and policies, and staff training.

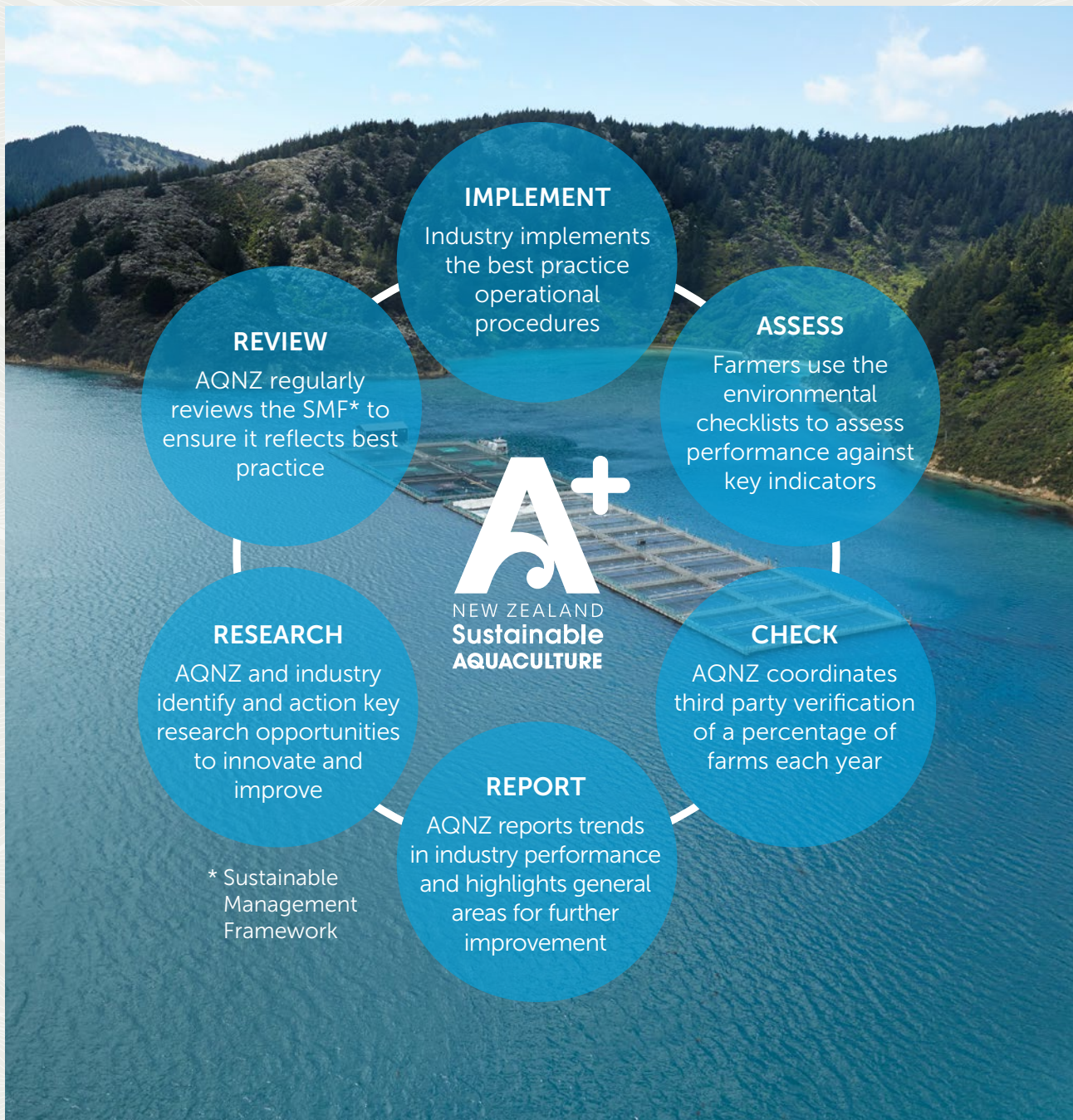
AQNZ continues to assist farmers to improve their environmental performance. We are developing standard operating procedures, on-water guides, forms, and templates for companies to assist their practices, record-keeping, and documentation. Continual improvement of both the programme and of industry's environmental performance are key priorities for AQNZ.

WHAT IS A+?

A+ is a world-class Sustainable Management Framework. It helps New Zealand aquaculture farmers continuously improve practices to ensure that we care for our environment, our communities, our products, our culture, and our treasured waters ensuring our premium seafood is carefully, responsibly, and ethically produced.

Our industry has a strong commitment to the environment and operates to high sustainability standards, with A+ helping us get even better.

The A+ Programme is primarily an industry improvement programme; it is different to global certifications because it is voluntary and largely self-regulatory. However, A+ provides a steppingstone towards global best practice and provides a good basis for growers who may be seeking international certification.

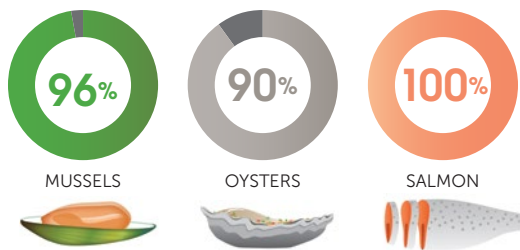


A+ GROWTH FOR CALENDAR YEAR 2020

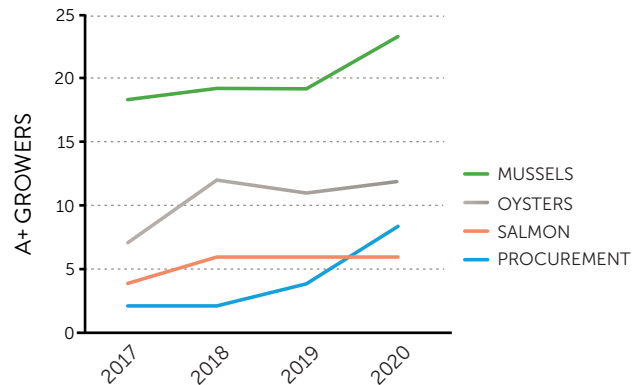
The A+ Programme has continued to gain momentum, and we are very proud to say that nearly every grower is committed to the A+ Programme. As the programme evolves to assist growers to operate towards global best practices, some councils are recognising its value by referencing A+ in their resource consent management.

The graphs below show the increase in commitment to the A+ Programme by production and by number of growers.

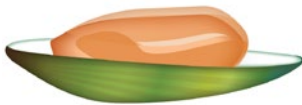
PRODUCTION COVERED FOR CALENDAR YEAR 2020



NUMBER OF GROWERS IN A+ 2020

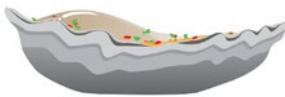


THE FOLLOWING GROWERS ARE COMMITTED TO AND ARE ACTIVE MEMBERS OF A+:



MUSSELS

- Aotea Marine Farms
- Apex Marine Farms
- Aroma Aquaculture Ltd
- Cedenco
- Clearwater Mussels
- Crail Bay Aquaculture
- Gold Ridge Marine Farms
- Gulf Mussel Farms
- James Marine Farms
- Just Mussels Ltd
- Kono NZ LP
- Kotare Marine Farms Ltd
- MacLab Ltd
- Madsen Marine
- Nelson Ranger Fishing Company
- North Island Mussels Ltd
- Paddy Bull Marine Farms
- Port Aquaculture
- Port Underwood Contracting
- Sanford Ltd
- Te Atiawa LLP Aquaculture
- Westpac Mussels Distributors
- Whakatōhea Mussels Ōpōtiki



OYSTERS

- Biomarine Ltd
- Clevedon Coast Oysters
- Coast Oysters
- Hutchings and Addison
- Jade River
- Marlborough Oysters
- Moana New Zealand
- Rodney and Daphne Cranwell
- Saltwater Workshop
- Sea Products (1998) Ltd
- Taniwha Oysters Ltd
- Waiheke Marine Farms Ltd



SALMON

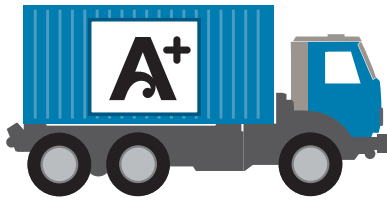
- Akaroa Salmon NZ Ltd
- High Country Salmon
- Mount Cook Alpine Salmon Ltd
- New Zealand King Salmon Ltd
- Salmon Smolt NZ Ltd
- Sanford Ltd

A+ PROCUREMENT PROCESS

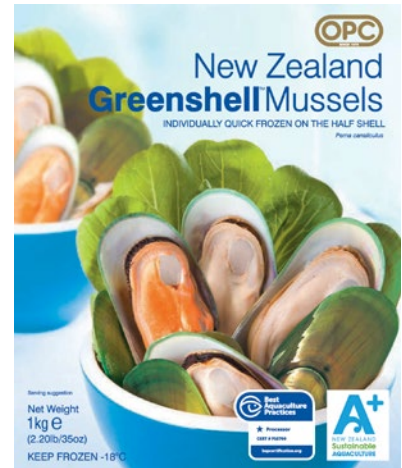
The A+ procurement policy has been designed for processing facilities to demonstrate to their customers their commitment to the A+ environmental and sustainability values. These companies can use the A+ logo on their product packaging and marketing material.

When adopting the A+ procurement policy, processing facilities must ensure that all sourced raw products are from growers who are active members of A+.

The following companies have committed to the A+ procurement policy:



- Clevedon Coast Oysters
- Doetsch Grether AG
- Kono NZ LP
- Omega Seafood
- OmegaFlex NZ
- OP Columbia
- Sea Products Mussels Ltd
- Talley's Group Ltd



Having the A+ logo on product packaging means that consumers are assured that the companies they support are committed to improving their environmental and sustainability practices.

A+ REPORTING AND CRITERIA

Each year growers complete the species-specific A+ checklist. The checklist comprises of questions that cover the A+ suite of criteria and key indicators as shown below. Questions are answered on a web-based portal system and evidence and documentation is uploaded to support the answers. The checklist questions are then assessed in a desktop review. A subset of growers is then selected to be verified by a third-party independent assessor.

Below are key metrics which help tell the A+ sustainability story and improvements that members can undertake.



COMPLIANCE



ECOLOGY



WATER QUALITY



WASTE



RESOURCES



FOOD SAFETY &
ANIMAL HEALTH



IWI PARTICIPATION



COMMUNITY



VERIFYING OUR PRACTICES

The A+ Programme has now completed three years of verification assessments utilising the expertise of third-party independent verification expert Belinda Yaxley of Nautilus Collaboration. Belinda develops quality management standards for aquaculture and holds roles in the Global Seafood Alliance, Best Aquaculture Practices (BAP) programme, and the Global Seafood Sustainability Initiative (GSSI), making her well placed to conduct the third-party verification.



"Nowhere in the world has an aquaculture industry come together voluntarily and recognised the need for a programme that supports continuous improvement."

Belinda Yaxley,
Nautilus Collaboration

In both 2020 and 2021, the verification assessment process was able to be fully undertaken remotely due to the ongoing COVID-19 pandemic.

REPORTING ON OUR SUSTAINABILITY



ECOLOGY

PROTECTING OUR AQUATIC ENVIRONMENT

A key priority for the aquaculture industry is to maintain our healthy ecosystems. Aquaculture farmers employ best environmental practices to manage any possible risk of effects on the marine and freshwater ecosystems, including benthic (seabed) effects, interactions with wildlife and management of biosecurity risks.

BENTHIC EFFECTS - Minimising effects on the ecosystems under farms

Shellfish farming typically has minor and small-scale effects on the physical nature of the seafloor beneath the farms, with low levels of organic enrichment. Generally, mussel farms are sited over soft sediments, where shell drop-off can have positive effects of forming reef-type benthic communities and increasing animal abundance.

While some mussels fall to the seafloor, they largely have positive effects on seabed (benthic) diversity. However, growers still look to manage shellfish harvest regimes to minimise shell drop-off and unnecessary biofouling.

Salmon farms can change the chemistry and ecology of the seafloor due to localised organic enrichment beneath the farm and are required, as part of their council consent conditions, to monitor and measure their benthic effects.

100%

In 2020, all of our growers followed best practice methods to minimise possible effects from farming activities on the seabed.

AQUATIC BIODIVERSITY - Respecting natural aquatic habitats, ecosystems and maintaining and restoring the diversity of indigenous species

Maintaining and supporting overall environmental health and indigenous biodiversity is a key objective of the A+ Programme. Growers are asked to report on indigenous species and sensitive habitats in the vicinity of their marine farming consents. These habitats are often shown on a map in relation to the marine farms, and growers are asked to provide monitoring reports to determine if the marine farming activity may have had any effect on nearby sensitive habitats. Sensitive habitats may include tube worm colonies, cobblestone reefs, red algae, horse mussels, or seagrass beds.

100%

In 2020, all salmon farming companies (both marine and freshwater) had an Environmental Monitoring and Adaptive Management Plan in place, in addition to their Standard Operating Procedures. These plans help ensure that any effects on aquatic biodiversity are routinely monitored and managed and are developed with regular council engagement.

BIOSECURITY - Protecting our waterways from invasive pests and pathogens

New Zealand is largely free from many of the pests and diseases found in other countries. It is important for both the grower and for New Zealand that biosecurity is not compromised.

Better biosecurity starts with awareness of biosecurity risk pathways, and staff training will ensure a coordinated approach to minimising biosecurity risks. Biosecurity Standards are now in place for all three species and with the help of A+ templates, farmers are developing farm level regional Biosecurity Management Plans (BMPs).



100%

The salmon industry is leading the way in biosecurity management with all growers having Biosecurity Management Plans in operation.

Oyster and mussel farmers are improving in this area, and the A+ templates will help drive improvements over the next period.

WILDLIFE - Respecting and protecting wildlife and their habitats

Marine farms around New Zealand operate in environments frequented by a variety of seabirds and marine mammals. There is a low risk of negative interactions between marine farms and local wildlife. The A+ Sustainable Management Framework sets targets to minimise any possible risk of wildlife entanglement from farming and vessel operations, and the safe release of any live entanglements, should they occur.

A+ is guiding improvements into how we record and monitor interactions with marine mammals and seabirds. In 2020, salmon farming companies were meeting these expectations with their wildlife plans and supporting documentation in place to record any wildlife interactions. A+ is developing Wildlife Management Plan templates to assist other growers to meet these requirements. A Standard Operating Procedure (SOP) template for marine mammal entanglements has also been incorporated to assist growers if they have an incident on or around their marine farms.

While A+ members have a great deal of industry knowledge about wildlife interactions and the effects on wildlife, increased focus should be placed on implementing Management Plans and Standard Operating Procedures, documentation, and staff training.



A+ is working with growers to develop a mobile app to record wildlife interactions and make the monitoring of our wildlife easier out on the water.



photo credit: Mike Bell

Spotlight on King shag in the Marlborough Sounds:

The New Zealand King shag (*Leucocarbo carunculatus*) is a rare species of marine cormorant found only in the Marlborough Sounds. The total population is estimated to be around 800 birds who only breed on a few rock outcrops throughout the Outer Sounds. In 2019 the Marine Farming Association (MFA) partnered with AQNZ, Government and industry members to fund an extensive King shag research programme to get a better understanding of the birds. The three-year project included chick banding, GPS tracking of adult birds, population surveys, and diet studies. The research has found that all King shag that live in areas where mussel farming occurs will use the farms as a safe place to roost, and that many birds are choosing to forage within and adjacent to farms.

Many growers also support land-based wildlife programmes such as:

Biomarine – “Donated shell and trucking resources for rebuilding Fairy tern breeding habitats on the Papakanui Spit (Kaipara Harbour)”.

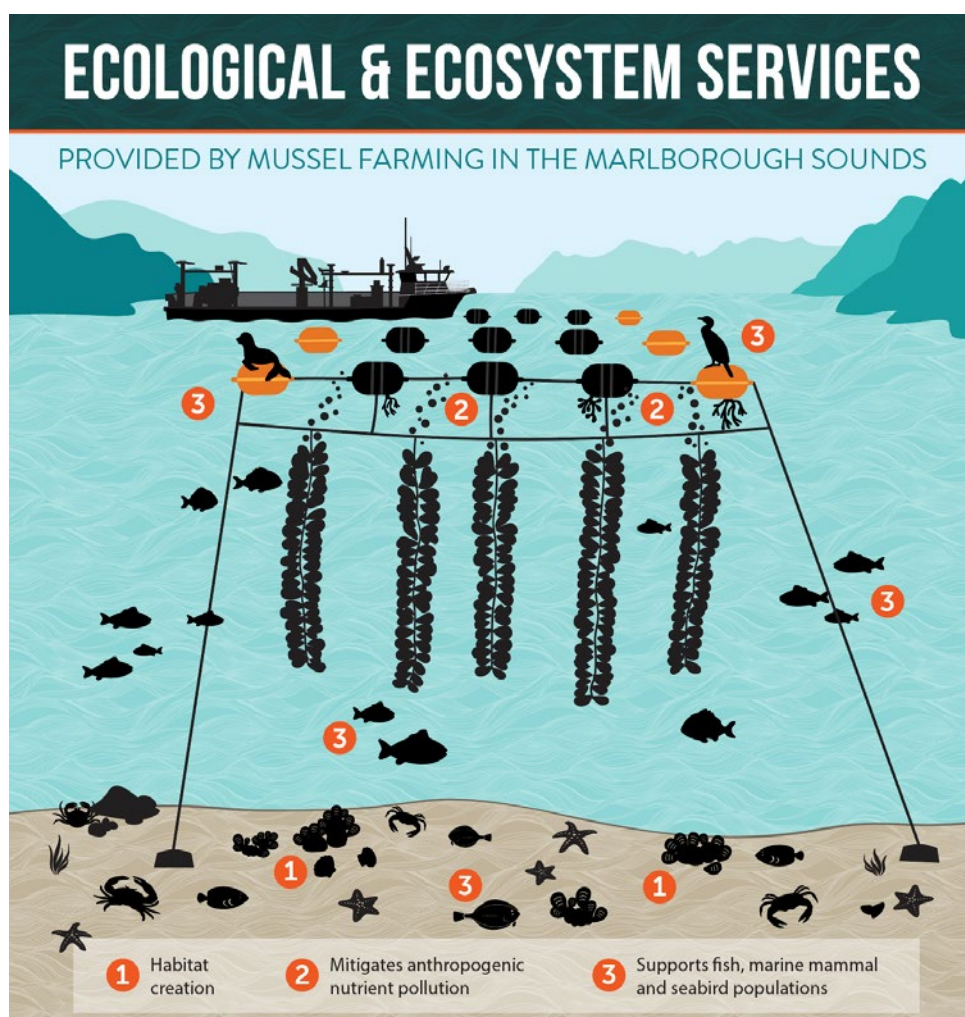
Marlborough Oysters – “Koha to Te Waahi Whakatupuranga Māori Reservation Trust for the control of land pests in Wairangi Bay”.

Clevedon Coast Oysters – “Pest management with DOC, set traps on the shoreline to catch rodents to protect shorebirds”.

ECOSYSTEM SERVICES - Helping promote and restore healthy functioning ecosystems

There is a growing awareness of the positive ecosystem services that aquaculture, especially shellfish farms provide. These include habitat creation, supporting biodiversity and filtering the water column. To improve our understanding of the contribution that mussel farming makes to the Marlborough Sounds coastal environment, NIWA reviewed all existing local and relevant international research to compile an authoritative review (2019) – the full report can be found [here](#).

Many growers have indicated that they are very supportive of the Revive Our Gulf restoration project in the Waikato/Auckland region. A similar initiative in Marlborough’s Pelorus Sound has many A+ members supporting the project by providing live mussels and vessels to help with distribution. Early indications from the projects have found that not only will mussels filter water and bind sediment, but they also produce a whole ecosystem around them, creating a positive environment where mussels continue to settle and generating a habitat for more things to flourish.



Report credit: Stenton-Dozey & Broekhuizen 2019

Aroma – “We started an initiative with industry and NIWA, to restore traditional mussel beds on various sites around the Marlborough Sounds. This research is still ongoing”.

Moana – “We commissioned an Ecosystem Services Review of the Whangaroa Harbour where Moana grows most of its oysters”.

Biomarine – “We worked with ‘Revive Our Gulf’ to deploy mussels in the Mahurangi Harbour and continue to support research projects from the University of Auckland by providing shellfish, boat and FLUPSY use to find innovative ways to restore shellfish beds”.



WATER QUALITY

PROTECTING OUR AQUATIC ENVIRONMENT

Good water quality is a key requirement for the aquaculture industry and farmers are very aware of maintaining a healthy environment within which they farm. The A+ Sustainable Management Framework requires growers to demonstrate they have procedures in place to manage their water quality by implementing plans to prevent pollution, oil spills, and manage discharges in accordance with regulations.

Farmers tend to demonstrate good compliance with the A+ requirements for water quality, managing potential discharges, accidental pollution events and understanding how to optimise water flows around farms.

Oil spill contingency plans, prepared under the Maritime Transport Act, describe the actions and responsibilities necessary to contain spills. Growers have demonstrated that they have good knowledge of what to do in the event of an oil spill. A spill response plan and register are requirements of the Maritime Transport Operator Plan (MTOP).

For freshwater farms, water discharged downstream from any marine farm is required to be maintained above 'national bottom lines' of the National Policy Statement for Freshwater Management and regional council objectives. Freshwater salmon farms regularly monitor and test the water downstream from their farms to ensure biodiversity and freshwater fish species are protected.



Photo credit: Mount Cook Alpine Salmon



WASTE MANAGING WASTE RESPONSIBLY

Any farming operation creates some forms of waste. The New Zealand aquaculture industry is conscious of minimising waste, recycling more, and showing kaitiakitanga of the environment. We are always looking to improve our environmental performance.

The A+ Programme sets out expectations around marine farming debris, recycling, and waste audits (better understanding the type and volume of waste generated across the business).

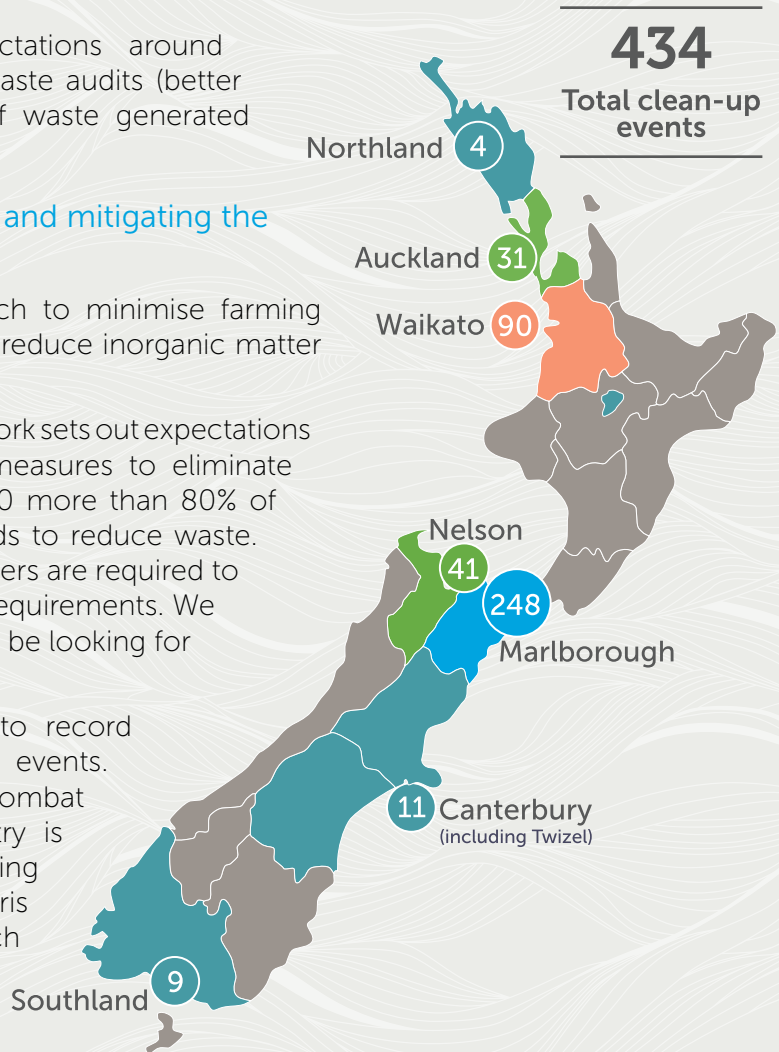
FARMING DEBRIS - Minimising and mitigating the discharge of waste materials

Growers are investing time and research to minimise farming debris and improve farming practices to reduce inorganic matter from reaching the environment.

The A+ Sustainable Management Framework sets out expectations around staff training in best practice measures to eliminate farm debris. Across the industry, in 2020 more than 80% of growers undertook staff training methods to reduce waste. Much of this training was verbal but growers are required to document staff training to meet the A+ requirements. We have focused on training records and will be looking for improvement in the coming year.

The A+ Programme requires farmers to record participation in environmental clean-up events. Beach clean-ups are a key tool to combat plastic in the environment. The industry is becoming more coordinated in key growing regions, identifying hotspots for debris accumulation, and coordinating beach clean-ups industry wide.

Map of beach clean-up events reported in A+ for 2020:



Spotlight on Top of the South leading the way in beach cleaning:

In 2021, the Marine Farming Association (MFA) developed an app to make reporting beach clean-ups and float pick-ups easier, faster, and more accurate. It focuses on environmental reporting in the Top of the South and allows members and the wider community to report beach clean-ups and float retrievals in real time. This information will help the MFA monitor any environmental impacts and to proactively undertake training programmes. The launch of the app coincides with the release of their new Environmental Certification Programme and the new Beach Cleaning Programme, both of which complement the A+ Programme.

RECYCLING AND WASTE AUDITS – Tackling plastic waste

Plastic waste has emerged as a global issue, and the aquaculture industry wants to play its part in reducing plastic waste where possible.

In 2020, AQNZ partnered with MPI and the Sustainable Business Network (SBN) to look at how we can minimise plastic waste within our industry. This [report](#) provides an initial snapshot of plastics use, challenges and recommended pathways moving forward. It identified key opportunities to reduce plastic waste, including new ideas and building on existing initiatives across our three farming sectors, such as reducing plastic packaging, upscaling mussel float recycling and increasing use of recycled materials.



Initiatives include:

- Mussel float recycling is now achievable and economical, and it is an industry priority to roll out the float recycling scheme nationwide.
- Salmon companies are trialling recycling feed bags.
- A+ members are investigating options to recycle farm waste (such as plastic ropes and ties) into new materials.
- Oyster growers are changing farming practices to reduce the number of plastic pegs that are currently used.
- Developing new mussel float attachments so lashings and plastic ties are not lost to the environment or sent to landfill.



A regional waste audit was undertaken in Marlborough in 2021 as a case study to understand the types and volumes of our plastic waste, to inform options for large-scale recycling and reuse. Following this audit, the next steps are for a coordinated industry/Government partnership to be established to design and identify funding options for a waste minimisation programme looking into:

- An expanded float recycling scheme
- Research into alternative rope technologies
- Research and trials for recycling options for used ropes and nets.

Aotea Marine Farms –

"We employ correct methods for cutting lashing ropes off backbone lines during harvesting. Proper cutting techniques ensure that no part of the severed lashing enters the waterway".



RESOURCES

USING RESOURCES EFFICIENTLY

An efficient use of resources allows farmers to reduce any potential impact from their farming operations on the natural environment. The A+ Programme requires evidence that farmers have robust systems in place to ensure infrastructure is well maintained and resilient and their resource use (such as feed, energy, water) is optimised, sustainable and efficient.

FARM STRUCTURES - Maintaining farm structures so they are fit for purpose, strong and secure

Structures should be fit for purpose, installed, and maintained to minimise any potential effects on the surrounding environment. Growers must have contingency plans in place (including staff training) which detail procedures for unforeseen events such as major storms or tsunamis. Best practices for checking anchors, moorings systems, and marine farm recovery should also be in place.

In 2020, most A+ growers had regular farm maintenance procedures in place to ensure infrastructure was well maintained. One area for improvement in shellfish farming operations is to increase the number of growers who have contingency plans for unforeseen events. Those growers demonstrating best practice procedures had contingencies in place to prevent damage or loss of farm structures as well as a breakaway plan, an emergency response plan, diver plan and adverse weather operational plan.

SALMON FEED

The A+ Programme sets out best management practices for feed use in salmon farming, including sustainably sourced raw materials, optimal feed composition and efficiencies, and well-maintained storage and delivery systems.

100%

All New Zealand salmon companies use feed suppliers who source sustainable raw materials and are independently certified. All salmon companies also record the amount of feed they use.



Continual research into best practice allows operators to reduce their environmental footprint. Research into optimal nutritional components of King salmon feed is in its early stages but showing promise following a multi-year research programme (Cawthron Institute’s Salmon Feed Conversion Efficiency (FCE) Research Programme).

ENERGY - Using non-renewable energy resources efficiently

Farm operations should measure energy consumption rates and seek to improve efficiencies when using non-renewable energy resources such as electricity and fuel.

70%

In 2020, more than two thirds of A+ members had procedures in place for recording fuel usage and maintaining these records. These growers who are leading the way, also had formal energy efficiency strategies and carbon reduction objectives.

Moana – “We measure our waste, water and energy inputs and outputs across all of our sites and establish continuous improvement plans that aim for zero waste to landfill by 2040. We will strive to make at least 5% reductions in our energy use relative to our oyster production annually with a long-term goal of 100% renewable energy and carbon neutrality within operations under our control.”

Madsen Marine – “Logistical strategy management has been implemented to ensure that the most efficient routes and workplans are established each week to ensure the minimum amount of fuel practicable is used. All vessels have suggested RPM levels to operate at to maximise fuel efficiency”.



Spotlight on understanding our emissions: Life Cycle Assessment (LCA)

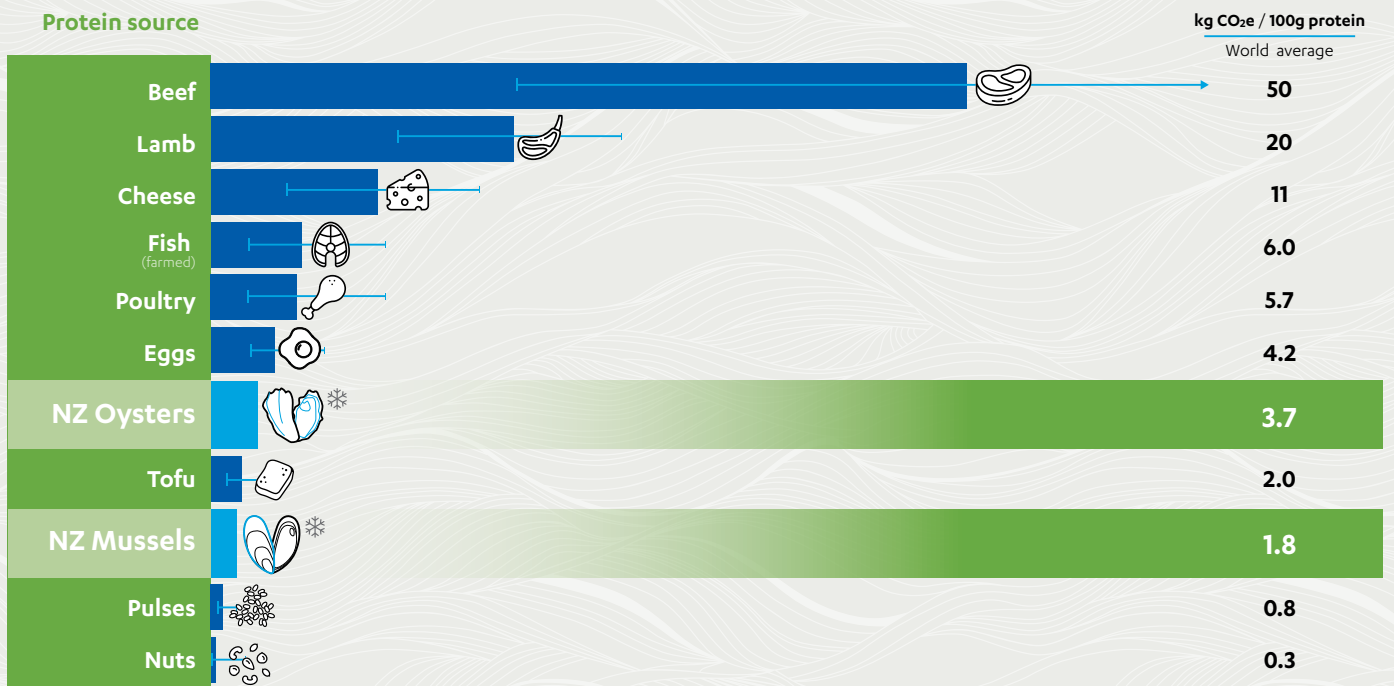
AQNZ and MPI have co-funded a study to compare the environmental performance of farmed mussels and oysters in New Zealand to other forms of farmed protein around the world. The study uses a tool called Life Cycle Assessment (LCA) to consider the full life cycle of farmed shellfish from ocean to plate. It covers everything from collecting spat, grow-out, harvest, processing, packaging, shipping, food preparation, and disposal of used packaging and shells. The sustainability experts at thinkstep-anz took the inputs from all these stages, such as diesel use on boats, on-farm materials like floats and wood, electricity used in processing, fuel use for transportation, and then calculated our environmental footprint and where the hotspots are.

The study found that New Zealand farmed shellfish have among the lowest carbon footprint of all animal proteins and are similar to plant-based proteins like tofu. In fact, their carbon footprint is lower than all other forms of animal protein considered by the referenced study, including overseas beef, poultry, dairy, and eggs (see figure below).

Visit our [website](#) for the final, independently reviewed report that is due out soon.

CARBON FOOTPRINT OF DIFFERENT DIETARY PROTEINS ON THE GLOBAL MARKET – production to retail only

in kg CO₂e / 100g protein



This chart shows global production and consumption data. It does not necessarily reflect New Zealand conditions. Frozen half-shell products have been chosen because they are the most common product exported from New Zealand.

— range of results for each protein source

(Source: thinkstep-anz. (2021). *Life Cycle Assessment of New Zealand Mussels and Oysters*. On behalf of Aquaculture New Zealand and the Ministry for Primary Industries.)



FOOD SAFETY & ANIMAL HEALTH

ENSURING SAFETY, QUALITY AND TRACEABILITY FROM FARM TO PLATE

Food safety and traceability are key priorities for our aquaculture products. Controlling the harvesting, handling, storage, and education around preparation of our products ensures our food is safe to eat and reduces the risk of any potential illnesses from consumption. Animal health and welfare during farming are also paramount.

FOOD SAFETY & TRACEABILITY - Ensuring safety and purity of the product through best practice farming and harvesting

Food safety and traceability are priorities for New Zealand aquaculture products throughout the entire supply chain from harvested fish and shellfish to consumer ready products. This creates consumer confidence that they are receiving high quality, safe products. Traceability assures consumers that production processes followed environmental, social and food safety standards, including, for example, the Shellfish Quality Assurance regulations.

If you grow or harvest bivalve molluscan shellfish commercially in New Zealand, you must operate in a classified growing area, and meet requirements under the Bivalve Molluscan Shellfish Regulated Control Scheme (BMS-RCS). The purpose of the BMS-RCS is to set the rules for growing, harvesting, processing, sorting, and transporting bivalve molluscan shellfish, including mussels and oysters. Growers must operate in a classified growing area and meet the requirements for food safety under the scheme. Every growing area has a management plan detailing how to manage and monitor risks for food safety, such as pollution, marine biotoxins and harvesting procedures. Regular water quality and shellfish sampling is also undertaken.

While A+ growers have high food safety standards, it's important that such practices are well documented to meet the A+ requirements. The A+ Programme requires full compliance with all relevant food safety and animal health legislation and obligations. Best practices include food safety training tools for harvest crews and farm staff. Written protocols and record keeping need to indicate compliance with food safety regulations. Some growers could improve documentation of their staff training as objective evidence is needed to meet the A+ Programme requirements.



"New Zealand's Bivalve Molluscan Shellfish Regulated Control Scheme is arguably one of the best shellfish monitoring programmes in the world"

Belinda Yaxley, Nautilus Collaboration

ANIMAL WELFARE

The New Zealand salmon farming industry recognises the importance of managing animal welfare to the highest standards across its farming practices. The A+ Programme sets out expectations for compliance with all relevant regulations and the development of best management practices for welfare in freshwater facilities, on marine farms, during transportation and during harvest.

100%

All growers who farm King salmon in New Zealand have a Standard Operating Procedure or Fish Health Management Plan with provisions for animal welfare and water quality monitoring.



New Zealand Farmed Salmon Welfare Standards

2021

Spotlight on A+ NZ Farmed Salmon Welfare Standards:

AQNZ has worked with New Zealand salmon farmers to develop the New Zealand Farmed Salmon Welfare Standards. This is a proactive step to ensure all salmon farming and harvesting processes are undertaken in accordance with global best practices and humane protocols. The Welfare Standards are based on current New Zealand legislation, international animal welfare policy, codes of practice, scientific research, veterinary advice, and practical farming experience.



IWI PARTICIPATION RESPECTING IWI VALUES

The A+ Programme encourages all growers to proactively engage with Iwi in their farming areas. Examples of some interactions over the last 12 months include consultation ahead of resource consent applications, provision of kaimoana for significant events, nurturing career opportunities, and working alongside Iwi to better understand mātauranga Māori and local tikanga.



There are several Iwi organisations already involved in aquaculture and through Te Tiriti o Waitangi partnership, Iwi participation is hardwired into aquaculture's future opportunities to help support Iwi economically, socially, and culturally. As a sector, we subscribe to the concepts of taiao, kotahitanga and kaitiakitanga and we will continue to weave mātauranga Māori into our sustainability practices.

Aroma Aquaculture – *“We manage sites in Squally Bay, Horomaka (Banks Peninsula) owned by Te Rūnanga o Koukourarata. We have started the process with the Koukourarata Trust to bring tamariki of leaving school age, to learn about working in the aquaculture industry through practical experience”.*



COMMUNITY

RESPECT FOR OUR COMMUNITIES

The aquaculture industry shares the marine and freshwater environment with many other users, including boaties, fishers, and local communities the length of Aotearoa. Aquaculture takes place predominantly in the regions, contributing jobs and opportunities in towns such as Whangaroa, Kaitaia, Ōpōtiki, Coromandel, Havelock, Akaroa, Twizel, Bluff and Oban. The aquaculture industry acknowledges the privilege to farm in such locations and operates to minimise any potential effects on residential amenities.

The A+ Programme measures levels of community engagement across the areas of navigation, communication, visual effects, noise and odour, and employee welfare.

VISUAL EFFECTS, NOISE, AND ODOUR

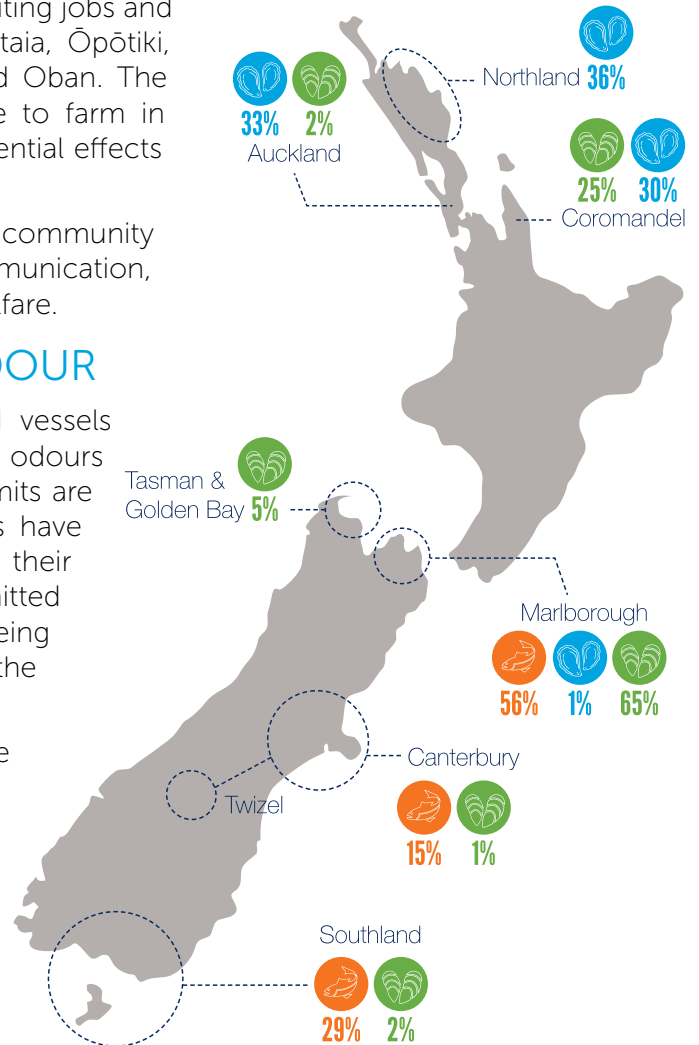
Aquaculture farming operations and associated vessels need to be kept in a tidy condition, and noise and odours should be minimised where practicable. Noise limits are typically governed by noise bylaws and farmers have training procedures in place to manage noise on their vessels and around wharfs. The level of noise emitted can vary, depending on the vessel, the activities being undertaken, the location, the wind direction, and the weather.

Some of the best practices employed to minimise disturbances when operating around neighbours and communities include:

- Minimising noise generated by vessels, equipment, VHF radios and music where practicable
- All vessels abiding by maritime speed limits
- Installation of noise reduction systems on vessel exhausts where practicable
- Land-based yards including equipment kept tidy and well maintained
- Prompt storage and disposal of organic waste and used farm equipment on land
- Safe and respectful operations at shared facilities such as wharfs and jetties.

In 2020, AQNZ developed and shared a Community Complaints Register template to allow growers to individually log any community feedback and record the corrective actions taken. A priority for A+ improvement is to assist growers to better document their practices to control and mitigate visual impacts, odour and noise disturbances and help with associated staff training. An A+ Residential Amenity Management Plan template is being developed and will help drive improvements over the next period.

Farmed right here



EMPLOYEE WELFARE - Fostering safe, positive, and vibrant workplaces

Employee health and safety is regulated by the New Zealand Health and Safety at Work Act 2015. Compliance within the A+ Programme for health and safety was to a very high standard.

In 2020, all A+ growers had good systems in place for managing health and safety on vessels, given the mandatory requirement for Maritime Operator Safety System (MOSS) plans.

Growers are very passionate about the employment of local people and use of local services where possible. Many growers have invested in wellness programmes to foster employee engagement, celebrate diversity, and build personal wellbeing. Some examples include:

- Free health checks, flu vaccinations and health insurance
- Transportation to and from work
- Access to counselling and support services
- Physiotherapy
- Professional training courses and career advancement.

Moana – “Our internal health and wellness programme (Hikoi ki te ora) provides our employees with a new kaupapa every month that encourages health and wellness; mental, physical, and emotional”.

COMMUNICATION AND COMMUNITY SUPPORT

An A+ objective is to show respect and build positive, constructive relationships with communities and other stakeholders. Good communication fosters a culture of transparency, open discussion, understanding of shared values for the benefit of all parties. To assist growers to collate and record this communication, A+ has provided a template for community feedback.

Marine and freshwater farmers are active members of the communities they work and live in. Engagement is demonstrated by attending meetings and events and giving support for community initiatives. Many growers are involved with popular festivals around the country, including Havelock Mussel and Seafood festival, Twizel Salmon & Wine festival, Coromandel Seafood festival, and the Canterbury A&P Show.

Below are other examples of community organisations that are supported by the aquaculture industry in terms of donations of time and resources.



A+ PROGRAMME IMPROVEMENTS

The A+ Programme continues to look at ways to refine industry practices and the frameworks that guide those practices. This year, following the verification process, a number of key areas have been identified for future focus.

More guidance and objective evidence

It has been recognised that growers should look to improve their documentation and record keeping in order to meet the A+ requirements and demonstrate best practices. Therefore, AQNZ will continue to support members with guidance material on how to develop better systems and documentation to meet these requirements.

Recommendations of evidence that needs to be provided to meet the A+ requirements have now been embedded into the A+ checklists. This will assist growers with the type of objective evidence that is required to be uploaded to the portal. We will be providing more guidance for those growers identified as needing more support.

Management Plan templates

For our industry to be resilient, AQNZ will continue to provide further support with standardised species-specific templates for policies and management plans to help growers meet the A+ requirements. Many councils are now including aspects of the A+ Programme as conditions for consent renewals, with Marine Mammals, Seabird and Waste Management Plans being required.

The A+ Biosecurity Standards for mussels and oysters were released in 2021, and the A+ checklists show that growers are improving in this area. The soon to be released A+ on-farm Biosecurity Management Plan templates will help drive further improvements over the next period.

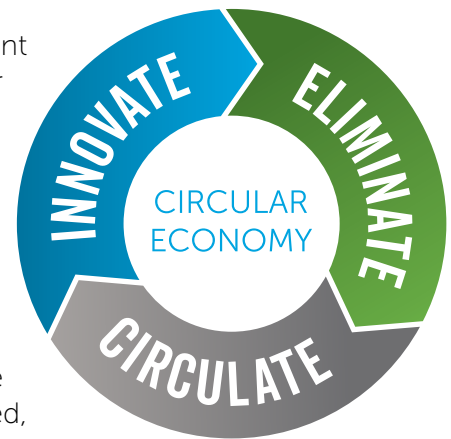
New tools

AQNZ is investigating the use of advanced reporting tools for our members, such as mobile applications to make recording of beach clean-ups and wildlife interactions easier, faster, and more accurate.

Waste minimisation

The industry is gaining a better understanding of our current waste, opportunities to reduce waste, and how we can better incorporate circular economy principles, such as recycling and reuse. There is strong support across the industry to address issues at the source and identify technical and innovative solutions to address our current waste challenges.

In 2020, a lot of effort was made towards improving how we manage and minimise our waste. Further work in this area will continue to be a focus for the A+ Programme. The industry should look to demonstrate best practice procedures more consistently, such as detailing in a plan, how waste is handled, stored, disposed, or recycled.



Refining checklists and scoring

A+ checklist questions were aligned across all species groups in 2020 to maximise question consistency. This has enabled AQNZ to better track progress and respond accordingly to the different species groups. Feedback from industry and the A+ Verification Assessor suggests that some questions require further refining to align with resource consents and best practices for next year's checklist.

Scoring the questions will also be refined to ensure the scoring is appropriate to the question and consistent between species groups.

WHAT'S HAPPENING IN THE A+ SPACE FOR 2022

In 2021, AQNZ moved the due dates for completion of the A+ checklists earlier in order to give A+ participants a longer window to complete the checklists, fulfill evidence requirements, and adopt improvements with sustainability practices. As the document management system within the A+ portal retains records from previous years, documents such as Management Plans previously uploaded remain in the system and do not need to be loaded again, unless they have been changed.

Below is a calendar timeline that outlines the A+ requirements for the 2022 calendar year

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
2021 checklist open Growers to provide supporting data	February 28 deadline for growers to complete 2021 checklists	2021 checklist scoring by AQNZ	Grower scoring reports A+ certificates issued	Verification Assessments	Verification Assessments Verification Assessment Technical Report
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
A+ Sustainability Report	Programme review	Revise checklists for 2022	Update checklist programme	2022 checklist open	
					Growers to provide supporting data

ACKNOWLEDGEMENTS

AQNZ would like to acknowledge and thank all the members of the A+ Programme for their continued support and commitment to the programme.

Industry collaboration continues to grow stronger as we respect and support the environmental and sustainability values of the A+ Programme. The benefits of working together for common goals by creating industrywide management plan templates will assist growers in achieving global best practices and meeting the A+ requirements.



NEW ZEALAND
Sustainable
AQUACULTURE

**CARING FOR OUR ENVIRONMENT,
OUR COMMUNITIES, OUR PRODUCTS,
OUR CULTURE, OUR TREASURED WATERS.
CREATING THE WORLD'S
BEST SEAFOOD**