

This On-Water Guide is a summary of the on-water related elements of the A+ Best Management Practices. It provides on-water staff with a quick reference for day to day operation. Farm Managers should also be familiar with the full Best Management Practices in the A+ Sustainable Management Framework.

Spat Catch	<ul style="list-style-type: none"> • Monitor spat settlement and move sticks to a higher level as soon as it is apparent that good settlement has occurred • Wire spat catching bundles to the racks to prevent them being lost or washed away • Repair and reuse materials and equipment as an alternative to disposal wherever possible • Where not possible to repair or reuse, retain inorganic materials on board for appropriate disposal on land
Stock Transfer	<ul style="list-style-type: none"> • Take care during transfers regarding contaminants e.g. very careful washing and sorting prior to shifting • Take care to ensure oysters are appropriately protected from excessive heat and sunlight while they are out of the water • Return rejects at the destination to land disposal • Keep records of all stock transfers, including transfer date, amount and location, and any treatments applied to reduce biosecurity risk • For transfers from hatcheries adhere to Freshwater Fish Farm Licence conditions and hatchery biosecurity procedures
Seeding	<ul style="list-style-type: none"> • Ensure optimum spacing and stocking density for the location. As a guide: <ul style="list-style-type: none"> ○ The optimum spacing for sticks on rails is no less than 200mm centres ○ Optimum density of spat per stick is 5-10 dozen for on-growing as stick oysters ○ Density of spat on flexible sticks for removal is much higher and can be >100 dozen per stick ○ Typical maximum stocking density equates to 30,000-40,000 dozen ○ The same stocking densities per hectare can be maintained for netlon bags. Typically up to 2,500 bags are carried per ha with 15-20 dozen growing oysters per bag ○ Plan the annual crop to take up no more than 2/3 of the rack space

Biosecurity	<ul style="list-style-type: none"> • Minimise opportunities for fouling of structures and equipment • Where feasible, do not transfer equipment such as bins, bags and footwear between regions • Where equipment is transferred, treat it prior to transfer using any feasible methods. A simple method is air drying for at least one month before transfer. • Keep records of all equipment transfers, including transfer date, amount/type and location, and the nature of any sterilisation treatment undertaken. • Conduct informal biosecurity surveillance during wash down operations • Become familiar with, and display on all vessels, the MPI 'New Zealand's Marine Pest Identification Guide' • Upon the discovery of any suspected new or notifiable pest phone the MPI Exotic Pest and Disease Hotline 0800 80 99 66 and follow any resulting recommendations
Structures and Debris	<ul style="list-style-type: none"> • Minimise gear and oysters being dropped to the seabed • Consider fallowing shallow areas to allow clean out of silt • Regular washing may be required to avoid excessive silt build-up • Washing is most effective as the racks emerge on a falling tide as mud is softer and more easily removed • Netlon bags may also require washing to prevent bags becoming clogged with sediment, reduce oyster settlement and prevent mudworm infestation • Maintain in good order and repair all structures, rafts, buoys, buoyed lights, notice boards, marker posts, and other equipment in the farmed area • Routine management should include checking for and recovering broken sticks or those that have come adrift, or to ensure netlon bags are tied down • Stock a small supply of replacement posts, rails, and galvanized nails which are immediately available to action daily maintenance requirements • Structural timber should be treated to H6 (marine) standard • Double (above and below) layers of crop are not recommended

	<ul style="list-style-type: none"> • Maintain all structures to ensure that they are restrained, secure and in working order at all times so as not to create a navigational hazard • Permanently brand each buoy within the oyster farm with owner's/operator's identification mark • Should any part of the marine farming structures be dislocated into the marine environment that is of a size that could constitute a navigational or safety hazard inform the council Harbourmaster and Maritime New Zealand immediately. Take all practical steps to find and retrieve the structure • As soon as possible after a navigational incident report it to the Maritime NZ Rescue Coordination Centre (RCCNZ) Free phone: 0508 222 433 • Inform the Harbourmaster of any known failures of oyster farm navigational aids • Record in the ships log any details of any navigational incidences in relation to navigation or vessel operation. Record time of incident, vessels involved, any injuries or damage and actions taken
Vessel Operation	<ul style="list-style-type: none"> • Use biodegradable cleaning and degreasing compounds to clean vessels • Display the pollution hotline for the regional council on board and notify all spills • Carry out regular antifouling of vessels that remain in the water, at appropriate locations/facilities, and maintain relevant records (e.g. paint type, expected service life). • For vessels travelling between regions, undertake the following as necessary and appropriate: <ul style="list-style-type: none"> ○ Ensure that the external hull is free of conspicuous fouling or notifiable pests, especially in niche areas. ○ Ensure sediments and biofouling debris (e.g. on decks, equipment, boat trailers if relevant) are washed off before departure to other regions. Clean trailered boats and their trailers with freshwater where possible. • Operate oyster vessels in accordance with maritime rules abiding by speed restrictions
Wildlife	<ul style="list-style-type: none"> • Record all incidences of seabirds becoming entangled in or observed to be affected by ingestion of marine farming equipment or debris

Harvest

- Oysters are sometimes most easily washed on the farm before harvesting
- Harvest stick oysters once they have reached full size or peak density (whichever comes first) to avoid undue drop off
- As a guide, harvest stick oysters at optimum density when 75% or more of the crop has reached market size
- Smaller oysters can be returned to the farm in netlon bags or trays
- Where sticks are heavily caught, harvest needs to occur before oysters become too large and crowded.
- A floating cage under the sticks at harvest can minimise loss of oysters
- Clean racks and rails during harvesting or before the farm is re-stocked.
- Avoid and/or minimise the accumulation of marine farming debris and stock onto the foreshore and sea bed
- Keep broken oysters and shell well separated from marketable oysters to prevent contamination
- Dispose of organic waste in an approved manner daily to minimise odours, flies and vermin
- Retrieve any non-organic materials (e.g. posts, rails, bags, trays, netting, sticks) no longer required from the marine environment for appropriate disposal on land
- Do not dispose of any non-organic material into the marine environment
- Secure all farm materials to best industry practise to prevent loss to the environment
- Wherever possible repair and reuse materials and equipment as an alternative to disposal
- Adhere to local industry Environment Programme
- Ensure operating practices conform to Animal Products Act (BMSRCS) standards for the handling and storage of product so that it does not become contaminated
- Conform to the harvesting and other requirements (such as reporting any unusual discharges) of the local industry's Shellfish Sanitation Programme.
- Give absolute priority to food safety of the crop and related water quality

Potential Discharges	<ul style="list-style-type: none"> • Adopt good management practices in relation to the use of chemicals and fuels on board • Store in contained areas (to avoid spills into the marine environment or bilge system) • Ensure that there is no discharge of contaminants such as oil, diesel, petrol, chemicals or effluent to the coastal marine area other than those authorised • Refuel at approved areas and supervise refuelling at all times. All outboard fuel should be premixed on shore • Keep absorbent material on board to absorb on board spills (e.g. spill kit) • Be familiar with the requirements of your local Regional Oil Spill contingency plans and your responsibilities under the Plan • Use biodegradable oils in hydraulic systems • Carry out spill drills with all vessel crew
Health and Safety	<ul style="list-style-type: none"> • Use proper protective clothing, gloves, boots and floatation gear at all times • Abide by Maritime New Zealand requirements (Maritime Operator Safety System (MOSS), Safe Ship Management (SSM)) and the Health and Safety in Employment Act • Ensure barge operators and some/all crew are trained in techniques of; small vessel handling, safety and first aid. • Ensure vessels carry appropriate lifesaving and emergency equipment and consider communication gear e.g. cellphone
Care	<ul style="list-style-type: none"> • Farmers on the water and at ramps and jetties should always be: <ul style="list-style-type: none"> ○ Civil; ○ Considerate in use of facilities; ○ Tidy with gear and equipment; ○ Minimising noise arising from farm and vessel and transport operations (e.g. being aware of VHF use or loud music)