

NEW ZEALAND'S RESPONSE TO THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER & SEDIMENTS 2004

SUMMARY AND ANALYSIS OF SUBMISSIONS ON DISCUSSION PAPER

Submission process

On 1 November 2007, MAF Biosecurity New Zealand (MAFBNZ) called for submissions from interested parties on managing the risk of marine pest organisms being introduced to New Zealand in ships' ballast water.

MAFBNZ published a discussion paper titled "Managing and Controlling the Risk to the Marine Environment from Ballast Water Discharges" to elicit feedback on the options for New Zealand in response to the International Convention for the Control and Management of Ships Ballast Water and Sediments.

The consultation process was targeted at the shipping industry specifically, and a range of marine stakeholder groups that benefit from biosecurity protection, including marine commercial and recreational groups; conservation and environmental groups; local government, and iwi groups. Stakeholder groups were contacted by email and provided with a link to the discussion paper on the MAF website.

Copies of the discussion paper were also mailed to ERMA New Zealand's Maori National Network after the Network was advised by MAF of the consultation at a hui held in Mahia.

Presentations on the discussion paper were made to forums held in Christchurch, Auckland, and Wellington organised by the Ministry of Transport to seek feedback on a number of maritime issues.

Submissions were sought by 21 December 2007. Twenty-one submissions were received. These are listed in the Appendix.

Summary of submissions

General submissions

The Department of Conservation (DoC)

The Department of Conservation considers that ballast water presents a significant risk to NZ's marine environment and welcomes the development of measures and systems that have the potential to provide improved protection.

The Department supports those options that propose improvements to the control of ballast water discharges and results in increased protection for the marine environment. Its preferred option is to “Become party to the Convention” due to the numerous benefits that would result from being a party. However if legislative amendments (option 2) can be made that result in a similar level of protection then this would be a suitable alternative particularly if reservations remain about joining the Convention.

Cawthron Institute (Cawthron)

The introduction of a performance standard for ballast water discharges is entirely dependent on the availability of effective on-board ballast water treatment systems. The Convention was written on the assumption that it would rapidly come into force and that the technology to meet the standard would develop quickly.

Whilst recognising that the production and adoption of treatment systems has been much slower than anticipated, Cawthron supports option 3 and recommends that Government make and implement legislative amendments to meet all obligations under the convention.

Cawthron’s support for this option is qualified by the need to confirm that the technology to comply with the performance standard is proven and commercially available. Subsequently, all new ships delivered three years after that date would be required to comply with the standard. Retrofitting of older ships should be allowed, but not mandatory.

Te Ngaru Roa ā Maui Incorporated (TNRM)

Invasive organisms introduced in ballast water could potentially destroy markets that are contributing to the national economy, and cause the loss of indigenous and endemic aquatic life systems. Aotearoa NZ is unique and the biodiversity that it offers is still not clearly understood or researched. It is imperative that as a country we take active steps to protect *Nga Taonga Tuku Iho*. The Crown has a responsibility to actively protect Maori interests as part of their obligations to Te Tiriti O Waitangi. While undertaking those responsibilities, the country as a whole will benefit as a result of taking on that responsibility.

Robin Keer-Keer (Keer-Keer)

Species introduced by ballast water can travel in any ballast water in any ship, and are not going to differentiate whether they are travelling in a foreign warship or a coastal vessel. So there should not be a list of which ships the convention or local rules do not apply.

Wellington Conservation Board (WCB)

Keeping invasive marine pests out of NZ waters is the best way of protecting special coastal and marine habitats and ecosystems. The existing controls have not prevented the introduction of new invasive marine species. As a signatory to the Convention, NZ would be better able to enforce ballast water controls and the country would stand a better chance of protecting its unique coastal biodiversity.

Otago Conservation Board (OCB)

Bringing ballast water into NZ waters is akin to delivering truckloads of foreign soil to our land, with all associated seeds and micro-organisms. No one would ever permit this scale of contamination in our terrestrial environment, and we must maintain the same standards in our marine environment.

Southland Conservation Board (SCB)

NZ has unique marine flora and fauna; introduced foreign organisms are known to have very significant adverse effects on flora and fauna. The costs of such introductions would fall on NZ ecosystems and communities who fish those ecosystems. These costs need to be factored into any analysis for not becoming party to the convention.

NZ Shipping Federation (NZSF)

Supports an international approach to the introduction of controls on the discharge of ballast water, and encourages government to work towards acceding to the convention.

Shipping New Zealand (SNZ)

Feels strongly that NZ should not at this stage sign up to the convention and should review things in 2-3 years time when it is clear that suitable systems are in place for compliance.

East Coast Hawke's Bay Conservation Board (ECHBCB)

Supports the option of becoming party to the Convention. This option ensures that NZ would have in place the best protection against the introduction of harmful aquatic organisms. Interim measures, stricter than that presently in force in NZ, are needed until the convention comes into force.

Ngatiwai Trust Board (NTB)

Ngatiwai are a coastal people and the marine environment is Taonga. Without stricter controls on ballast water discharges, the degradation of the marine environment is inevitable; through continued establishment of non-indigenous invasive species, which compete with native species for habitat areas. Stricter controls on ballast water discharges are more likely to reduce the risk of invasion by non-indigenous invasive species within mahinga kai areas of the Ngatiwai rohe.

Ministry of Fisheries (MFish)

To the extent that discharge of ballast water is a known vector for the introduction of marine organisms, MFish supports any measure that would effectively mitigate that risk. MFish favours implementing stricter controls on ballast water discharges.

West Coast Tai Poutini Conservation Board (WCCB)

As newly introduced species are almost impossible to eradicate and the impacts of invasive marine species are likely to be irreversible, the Board feels that it is imperative that New Zealand joins the 'International Convention for the Control and Management of Ships Ballast Water and Sediments.'

Glenice Paine (Paine)

The increasing marine traffic through Queen Charlotte Sound has increased the biosecurity risk to the marine environment. Therefore, protecting the mauri or integrity of our waterways has fast become one of prime concern for iwi/maori from both a cultural and economic point of view. For the tangata whenua in this area especially, the mana of the iwi rests on their ability to provide for manuhiri as well as themselves. As kaitiaki, the tangata whenua have an obligation to do all they can to ensure the mauri of the coastal environment and this includes minimising/eliminating risks to that environment. The discharge of ballast water is one of those risks.

Environment Bay of Plenty (EBOP)

Environment Bay of Plenty supports New Zealand becoming party to the International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004.

Aquaculture New Zealand (ANZ)

Biosecurity is a strategic issue for the aquaculture sector. The industry relies on healthy marine and freshwater ecosystems to grow its products. Many aquaculture systems (in particular marine farms) are open systems and therefore potentially vulnerable to pest incursions. Marine Biosecurity is considered a difficult aspect of biosecurity, reflecting the challenges posed by the aquatic environment and associated pest species. The challenges associated with responding to marine incursions provide a strong incentive for incursion prevention.

The aquaculture sector is particularly concerned about the potential for ballast water to introduce harmful microscopic organisms. Pest organisms can adversely affect aquaculture in a number of ways, including by directly harming stock or causing operational difficulty; compromising food safety; affecting the wider marine ecosystem (e.g. a zooplankton species that would impact phytoplankton); affecting overseas market access.

The introduction of new toxic micro-algae species not currently present in New Zealand via ballast water could have serious and adverse effects for commercial, recreational and customary use of the marine environment, as well as present substantial public health and ecological concerns. There is a clear imperative for measures to manage these risks by addressing ballast water discharge as a key incursion pathway.

National Institute of Water & Atmospheric Research (NIWA)

Discusses procedures for ballast water sampling for compliance purposes.

WWF-New Zealand (WWF)

The threat to New Zealand's unique marine biodiversity from introduced species is not only immense but imminent. Introduced species, including those transmitted through ballast water exchange, have been identified as one of the top threats to marine biodiversity globally. There are already a number of introduced species present in New Zealand's waters that have significantly altered marine ecosystems in the areas they have invaded.

Therefore, WWF believes that, not only is it important that New Zealand implements the provisions of the Convention in its own waters and for ships flying a New Zealand flag, it also is important that New Zealand demonstrates international leadership by becoming a party to the Convention.

New Zealand Seafood Industry Council (SeaFIC)

The seafood industry is entirely dependent on a healthy marine environment and supports initiatives to protect the productivity of that environment, particularly management of risk associated with biosecurity incursions. It welcomes any initiative to further strengthen border controls and prevent introduction of unwanted organisms.

SeaFIC supports consistent national and international measures to improve controls on ballast water discharges. It believes that as shipping is an international industry there are clear benefits of a standardized international control regime which imposes proven and effective controls on the management and treatment of ballast water to prevent introduction of unwanted organisms, supported by a stringent compliance and penalty framework.

Maritime New Zealand (MNZ)

MNZ has a close interest in any Government determination that participation in this treaty is in the national interest, given that it is potentially one of the agencies that could be charged with exercising and fulfilling state party privileges and obligations. While technology may not have moved ahead at the pace envisaged when the treaty was made in 2004, MNZ supports New Zealand taking the long view: that in time the Convention will become part of the international maritime landscape and participating in it would appear to be the best option for New Zealand.

Pacific Institute of Resource Management (PIRM)

Seeks rapid progress towards joining the Convention. In the interim, considers there will be value in introducing measures that will be part of Convention compliance, both for their intrinsic value for biosecurity as well as for promoting readiness for ratification of the Convention.

Responses to questions posed in the Discussion Paper

Options for New Zealand

Option 1 – Maintain the status quo

Are there any other advantages or disadvantages of the existing ballast water management measures?

DoC: The existing measures appear to be the minimum level necessary to provide some protection for the marine environment. That they expose ship/crew to risks and may not be fully effective raise doubts as to their suitability and increases the chance of either accidental or deliberate non-compliance.

WCCB: Australia has signed the treaty subject to ratification so ships trading to and from Australia will have to comply with the new rules for on board treatment of discharges, so New Zealand could hardly stand alone with a different regime.

ANZ: An additional disadvantage of the existing control measures is difficulty verifying whether they have been implemented. This is because they are process focused (i.e. vessel operators must subject ballast water to a specified process) rather than performance focussed (i.e. vessels operators must ensure their ballast discharge meets a specified standard which measures the primary agency of risk). Input focused standards risk encouraging pseudo or token compliance (i.e. compliance which adheres to the specified process, but does not actually achieve the level of risk reduction intended). Performance standards focus less on the actions undertaken to achieve compliance, and more on genuine measures of risk reduction.

Are existing measures sufficient to protect against the introduction of harmful aquatic organisms in ballast water being discharged in New Zealand waters?

DoC: From the analysis provided and the potential that not all ships can do this either safely or effectively, it would appear that the current measures are not sufficient to guarantee that our unique environment is effectively protected.

WCB: The existing controls have not prevented the introduction of new invasive marine species.

OCB: Current controls on ballast water discharges are inadequate, as non-compliance is undetectable and unenforceable.

SCB: Maintaining the status quo will almost certainly result in further introductions of foreign organisms to the detriment of NZ's unique marine flora and fauna. Such an approach has a significant cost for NZ's marine ecosystems and communities rely upon them.

NZSF: The existing IHS for ballast water does not provide a satisfactory mechanism to take action against non-compliance. The controls imposed under the IHS should remain until the convention comes into force.

WCCB: Considers the current exchange standard is very unsatisfactory in that the standards achieved are not good enough to take forward.

Paine: The status quo (Option 1) does not sufficiently protect the marine environment. This is particularly evidenced in the Marlborough Sounds which has experienced several marine incursions (*styela clava*, *d. vexillum*). These two sea squirt may not have arrived in ballast water, however, their spread throughout the region is probably typical of any potential future incursions that could be traced back to ballast water. Also, currently there appears to be little monitoring of ballast discharge so the problem could be a lot bigger than first envisaged.

ANZ: Because of the issues associated with process based measures, the existing measures are probably not adequate to protect against risks posed by ballast water discharges. Consequently, this option is not supported by Aquaculture New Zealand.

Do you support this option? If so, please provide your reasons and what you see as the key advantages/disadvantages.

No submissions supported this option.

Option 2 – Make legislative amendments without becoming party to the Convention

Do you hold any reservations about any specific requirement(s) of the Convention? If so, identify the specific requirement and describe the substance of your reservations about it.

SNZ: There are not enough systems ready to be installed to treat ballast water to the performance standard provided in the convention. Since the release of the discussion paper, the IMO has found the implementation date to be impractical and has delayed the application of the performance standard to new ships by two years (to 2011).

SeaFIC: There is inadequate information on the endurance, consistent effectiveness and ability to routinely meet required performance levels of on-board treatment systems. Treatment systems need to be proven operationally, not just technologically, before they are accepted as the key defence mechanism.

SCB: The scope of initial inspections is of concern, particularly the reliance on checking of logbooks. Log books have been found to be falsified in a number of US prosecutions relating

to the use of oily water separators. Methods for quick and simple testing of ballast water for foreign organisms are required.

The Board also considers that oil rigs and floating offshore production platforms may not be covered by the convention.

Are there any other advantages or disadvantages of this option?

DoC: Going it alone means New Zealand will be required to carry the majority of the costs of research and development of any proposed measures and for the enforcement of those measures. This option may not result in improved compliance nor address the issue of enforcement of requirements on boats that leave ports after a short time. Imposing stricter control measures (similar to the requirements of the Convention) on a standalone basis is likely to be extremely costly and there is no guarantee that legislative amendments to our domestic legislation will be sufficient to result in improved protection.

SCB: A number of major shipping nations may be slow to ratify this convention. Bilateral regimes and NZ legislation may also be required to control ballast water discharges.

ANZ: While not joining the convention and instead relying on domestic legislation theoretically conveys the ability to impose tougher controls, the convention gives a party leave to impose more stringent controls in its waters in any case.

In a practical sense New Zealand, which receives only a small proportion of global shipping traffic, is not in a position to impose stricter controls than specified by the convention. A better approach would be to demonstrate leadership by acceding to the convention, and then utilise that position to lobby for a gradual raising of the standards contained within it.

Are the risks to New Zealand's marine environment from ballast water discharges sufficient to warrant New Zealand introducing stricter control measures?

DoC: Ballast water presents a significant risk due to New Zealand's heavy reliance on imported goods. Stricter controls are warranted given the reality that prevention of arrivals is the only measure that will result in an effective control of the risks. Our large coastal zone means that the eradication/management of exotic organisms once present in numbers is not feasible in the majority of cases.

Paine: The risks to NZ's marine environment is increasing all the time. It is obvious that what we are doing now is not enough. The discharge of ballast water is one of those risks.

Do you support this option? If so, please provide your reasons and what you see as the key advantages/disadvantages.

DoC: Prefers option 3, however if legislative amendments can be made that result in a similar level of protection then option 2 would be a suitable alternative particularly if reservations remain about joining the Convention.

Keer-Keer: Supports Option 2 (Make legislative amendments without becoming party to the convention). This would be a safe option to take; better than sitting on our hands and doing nothing. Becoming party to the Convention is going to require Option 2 anyway.

ECHBCB: Supports this option as an interim measure only until the convention enters into force. It may take some time for sufficient countries to be signatories to the convention for it to come into force, but in the meantime New Zealand needs to improve measures to prevent invasion of our waters by alien marine organisms.

Paine: Option 2 allows NZ to enact rules (legislation) that protects our waters whilst still aligning those rules with those obligations under the Convention that suit our situation. It will be some considerable time before the Convention is signed off and the costs to NZ of waiting for this to happen could be a lot more (socially, economically and culturally). NZ needs to be doing something now to strength those rules we currently have.

SeaFIC: New Zealand should be cautious and defer becoming party to the Convention. In the interim, SeaFIC recommends that New Zealand give effect to particular requirements of the Convention particularly management and control methods relating to ballast water exchange. This includes developing and maintaining ballast water management plans, record keeping and reporting arrangements and survey and certification requirements.

New Zealand should require vessels irrespective of whether they have on board treatment plants to exchange ballast water in accordance with the revised requirements until such time it is confident in the use and efficacy of treatment systems and becomes a signatory to the Convention.

SeaFIC recommends that the penalty regime be comprehensively reviewed concurrent with legislative amendments to give effect to some of the Conventions' requirements. Stronger incentives are required for vessel operators to comply with the requirements of any water ballast management requirements.

Option 3 – Become party to the Convention

Are there any other advantages or disadvantages of becoming party to the Convention?

DoC: Becoming a party to the Convention will ensure the development and imposition of consistent minimum standards to deal with the issues that arise from the exchange of ballast water. It ensures that risks associated with ballast water are given a global focus.

NZSF: Does not accept that ships flagged to non-parties will choose not to come to NZ to avoid complying with the convention.

WWF: The elements of the Convention, which took many years of intense international negotiation, are important for many areas of the world; however, if insufficient countries become parties to the Convention these will never enter into force.

SeaFIC: Supports the management and control methods relating to ballast water exchange (Regulation D-1) contained in the Convention but is concerned that the Convention places ultimate emphasis on the use of emerging technology, in the form of on-board treatment systems, as the key risk management measure to prevent the introduction of unwanted organisms. The adoption of this new technology must be based on good empirical evidence that these systems are robust, perform consistently over time and are effective at meeting performance standards before they are adopted as the key and only risk management tool for vessels entering New Zealand waters.

The use of a performance standard that measures the primary agency of risk is ultimately preferable to existing ballast water process requirements. Therefore, if treatment plants are effective, can meet proposed performance standards and can be retrofitted, then they will provide better overall protection and vessel safety measures than the current Import Health Standards for Ship's Ballast Waters.

Are the risks to New Zealand's marine environment from ballast water discharges sufficient to warrant New Zealand introducing stricter control measures?

WCCB: Of all the marine species introduced into New Zealand waters, many are thought to have arrived in ballast water. As newly introduced species are almost impossible to eradicate and the impacts of invasive marine species are likely to be irreversible, the Board feels that it is imperative that New Zealand joins the Convention.

ANZ: Ships' ballast waters and associated sediments are a key potential pathway for incursion of marine pests. Of particular concern is the potential for ballast water to introduce harmful microscopic organisms. For example ballast water could contain any or all of toxic micro-algae that pose a threat to fish or shellfish; planktonic stages of pest species of macro-fauna; harmful fully planktonic species; and resting stages of various pathogens. Ballast water is a significant marine vector of concern for New Zealand given the extent to which the national economy depends on shipping for trade. Initiatives to reduce or eliminate the risks posed by ballast water discharges will reduce the incidence of incursions into New Zealand's marine environment.

Are the measures contained in the Convention sufficient protection against the introduction of harmful aquatic organisms in ballast water being discharged in New Zealand waters, or should New Zealand impose additional stricter measures?

DoC: New Zealand may have areas where stricter measures are required to ensure effective protection e.g. marine reserves/protected waterways. Otherwise, only time (and monitoring of the compliance and efficacy of the measures proposed by the convention i.e. ballast water treatment) will tell whether additional stricter measures are needed.

TNRM: Is concerned that despite joining the Convention and adopting the control regime, there is still no certainty in removing the invasive organisms; therefore we support further tightening of legislation to remove that potential.

NZSF: Any additional measures should only be considered when there is evidence over time that that approved treatment systems are not adequate and are placing NZ at risk.

WWF: The Convention's standards and procedures for managing ballast water may still not be rigorous enough to completely prevent harmful invasive aquatic organisms being introduced to New Zealand. However, being party to the Convention would not prevent New Zealand from adopting stricter standards if necessary.

ECHBCB: A further concern is that vessels working between harbours within New Zealand waters may transfer and spread from one harbour to another, by means of ballast water discharge, alien aquatic organisms which have already established in some but not all New Zealand harbours. Examples of this include the polychaete *Pseudopolydora kempfi* from Whangarei harbour to Auckland harbour; the bivalve *Limnaria orientalis* from Gulf harbour to other harbours. Measures need to be imposed to prevent this happening.

Cawthron: Biosecurity New Zealand should be required to review its commitment to the Convention at least every two years and consider establishing new, higher standards as improved treatment technologies becomes available.

Do you support this option? If so, please provide your reasons and what you see as the key advantages/disadvantages.

DoC: Believes that a greater level of protection of the marine environment will result from the implementation of measures that are proposed by the Convention, and that choosing to become a party to this agreement is likely to have the additional benefits of long term cost savings for research, systems set up, and monitoring; and a greater level of compliance/enforcement of the proposed measures, compared to if they were required by New Zealand alone.

TNRM: Supports option three. The international standardised control regime will be more beneficial to shipping operators and in addition has the potential to reduce the issue of different legislation and compliance in different countries. The regime will also be internationally recognised and binding which is a huge advantage.

SCB: This is the preferred option because internationally agreed treatment systems will be designed and installed on ships.

OCB: The extra precautions that the convention would bring are important advances, such as agencies can monitor compliance; treatment systems will be required; reduced risk of organism survival; treatment of biofilm and sediment hazards.

NZSF: The more consistent NZ law is with international conventions then the greater the compliance that can be expected. The convention will provide recourse for non-compliance. Acceding to the convention would enable NZ to effectively meet its international obligations to prevent, reduce and control pollution of the marine environment as well as internal strategies.

ECHBCB: Considers the reduction in the risk of introduction of harmful aquatic organisms is the key advantage, and this outweighs any additional costs associated with compliance to the rules of the convention.

MFish: This option would most effectively meet New Zealand's obligations to prevent, reduce and control pollution of the marine environment, and give effect to the Government's Biodiversity and Biosecurity Strategies.

EBOP: Supports measures preventing the further introduction of exotic invasive marine organisms into the Bay of Plenty region. The current Bay of Plenty Regional Pest Management Strategy, which includes a section on marine biosecurity, identifies high threat marine pest species and describes the current ballast water exchange policy and regulations. Marine pests such as Undaria (*Undaria pinnatifida*) and Asian date mussel (*Musculista senhousia*) are established in Tauranga Harbour and have most likely been introduced via ships' ballast water.

ANZ: This option will provide the best practicable means of protecting against risks associated with ballast water discharges, without compromising trade. By becoming a party

New Zealand will demonstrate leadership on this issue; and will increase the likelihood of the convention coming into force; and New Zealand will be implementing a set of control measures that are internationally consistent, and therefore likely to enjoy a high level of compliance. The convention will ensure an eventual transition to a performance based set of control measures.

WWF: Believes that it is absolutely vital that New Zealand becomes a party to the Convention. While New Zealand's action alone will not be sufficient to bring the Convention into force, it is important that New Zealand's commitment is demonstrated to the international shipping community. Becoming party to the convention would also mean the New Zealand government more effectively meets its obligations to prevent, reduce and control pollution of the marine environment, and would give effect to Government's Biodiversity and Biosecurity Strategies.

MNZ: In the interests of protecting the marine environment, MNZ supports New Zealand's accession to the Convention.

PIRM: Supports New Zealand becoming party to the Convention. This option would achieve the best biological outcome, whilst being advantageous from the points of view of operational safety and enforcement, and is essential for NZ to maintain its position of leadership in the field of ballast water biosecurity management.

The Best Option for New Zealand

What is your preferred option for New Zealand in response to the Convention?

- 1. Maintain the status quo, and not become party to the Convention*
- 2. Make legislative amendments without becoming party to the Convention*
- 3. Become party to the Convention*

DoC: Supports option three.

Cawthron: Supports option three.

TNRM: Supports option three.

Keer-Keer: Supports option two.

WCB: Supports option three.

OCB: Supports option three.

SCB: Supports option three.

NZSF: Supports option three.

ECHBCB: Supports option three.

NTB: Supports either option two and/or three.

MFish: Supports option three.

WCCB: Supports option three.

Paine: Supports option two.

EBOP: Supports option three.

ANZ: Supports option three.

WWF: Supports option three.

SeaFIC: Supports option two.

MNZ: Supports option three.

PIRM: Supports option three.

Proposed approach to implementing stricter control measures for ballast water discharges

Do you have views or preferences on how stricter control measures on ballast water discharges could be implemented?

DoC: The development of new and specific legislation to manage the risks of shipping including ballast water is likely to be easier because it is purpose built. It would have the ability to clearly reflect the eventual proposals/measures of the Convention and could be developed to be broad enough to cover other pathways such as hull fouling. Amending existing legislation can create issues.

TNRM: Does not support single changes to the Biosecurity Act 1993 or the Maritime Transport Acts 1994 but prefer a mix of the above legislations. Creating stand alone legislation still needs to have shared responsibilities between the agencies and therefore achieving changes to the different Acts may achieve the same outcomes. It also makes sense to strengthen the position of both agencies; and act in cross governmental approaches, particularly as the functions can be separated (land and sea issues) and have clearly defined boundaries of responsibilities.

ECHBCB: Supports the approach of working out how best to implement measures and then decide on the best legislative vehicle to use, thus integrating the new measures with the existing functions of MAF Biosecurity NZ and Maritime NZ.

Paine: Suggests that rules governing ballast water discharge should come under one Act - the Biosecurity Act. Maybe it would be simpler if one agency (MAF) dealt with this issue throughout: to avoid confusion within iwi/maori about the interaction of legislation currently in force.

EBOP: Considers that MAF Biosecurity New Zealand should have overall leadership responsibility for ballast water policy.

ANZ: Implementation of the ballast water control system via Maritime New Zealand seems to be the most logical approach. This will be contingent upon suitable capability being created and resourced within MNZ.

SeaFIC: Supports pragmatic and least cost options for implementation of any new measures for ballast water discharges. The cross government approach proposed appears to be a rational consideration of the delegation of duties and responsibilities between Maritime New Zealand and MAF Biosecurity.

MNZ: Considers it would be efficient for MNZ to assume flag and port state responsibilities under the convention as canvassed in the paper, given the fit with existing functions and role.

Effects and costs of stricter control measures on ballast water discharges

Do the beneficial effects for New Zealand from becoming party to the Ballast Water Management Convention outweigh the costs?

DoC: The benefits of joining the Convention include shared costs in research/development of sanitary measures and compliance/enforcement mechanisms and procedures. There is also the significant benefit of overcoming enforcement issues for international shipping companies. The implementation of international standards make the initial cost outlay for ballast water treatment systems more cost effective as opposed to if it was a requirement for New Zealand only. The most significant benefit is a greater level of protection for our marine environment.

The costs of joining i.e. setting up monitoring/enforcement systems are likely to be less due to the sharing of knowledge and experience and the use of international standardised procedures. These costs are likely to result even if New Zealand chooses to impose stricter standards and undertake a greater level of monitoring without becoming party to the Convention.

OCB: The ecological and economic costs of marine invasions cannot be overstated, and the additional costs associated with implementing the convention are a small price to pay for the extra protection it will provide.

SCB: The costs of introduced foreign organisms would fall on NZ ecosystems and communities who fish those ecosystems. These costs need to be factored into any analysis for not becoming party to the convention.

ECHBCB: The reduction of the risk of introduction of harmful aquatic organisms is the key advantage, and this outweighs any additional costs associated with compliance with the rules of the convention.

ANZ: Believes the benefits of becoming a party to the convention are likely to far outweigh the costs.

WWF: Believes the cost incurred in delivering on the new obligations under the Convention would be offset by the benefits to the marine environment and the demonstration of New Zealand's commitment to managing marine biosecurity in the international context.

PIRM: The costs are relatively small and well justified by the prospect of a significant reduction in the biosecurity risks embodied by international shipping movements. There is also likely to be an advantage in reduced spread of agents that have already established in NZ.

Are there any other costs to shipping from stricter control measures on ballast water discharges?

None submitted.

Which of the means of funding stricter control measures on ballast water discharges do you support, and why? Direct Government funding, or cost recovery from the shipping industry?

DoC: User pay (or sector contributions) is being suggested for other “biosecurity” related activities, and therefore it may be considered unfair if the marine environment is treated any differently. Funding for the stricter control measures should be consistent with what is decided for other sectors.

TNRM: We do not support that more stringent measures should be born by the Crown but support cost recovery from the shipping sector by way of user charges.

NZSF: Supports a charging regime that applies only on re-inspection; necessitated by a ship’s non-compliance. As not every ship is inspected, it would be inequitable to charge for first inspections.

SNZ: Any additional costs associated with inspections other than re-inspections will inevitably impact on shippers of freight.

ECHBCB: Supports cost recovery from the shipping industry. Shipping companies profit from their trade, so it is therefore their responsibility to reduce harmful environmental effects of their business at their cost. If this means that transport costs increase then they will no doubt pass them on to consumers. If the cost was on government then tax payers, even those whose consumption habits mean they use little of what is transported by sea, would bear the cost.

WCCB: As most of the costs fall on the ship owners to install on board treatment facilities the Board favours cost recovery related to ship inspections only where non-compliance has been identified.

ANZ: Supports recovery of costs from segments of the shipping industry that discharge ballast water loaded outside of New Zealand waters.

SeaFIC: Believes that any funding of increased costs to the government to protect the health of the aquatic environment, through the implementation of stricter controls must be recognized as having a high public-good component. Beneficiaries are many and varied, including significant general public interest.

MNZ: Welcomes the clear recognition in the paper that there will be additional one-off and ongoing costs requiring new funding. MNZ would support the introduction of a levy on ships for funding on-going operational costs, such as those associated with the control provisions

under article 9 of the convention. The one-off costs, including requirements for rules maintenance should be funded by the Crown.

PIRM: Supports baseline funding by Government, with cost recovery for any re-inspections or other compliance issues that arise as a result of actions or inactions of ship operators. While believing that costs should fall upon the creators of biosecurity risk, in this case it is the demand from a wide variety of consumers of imported goods that drives most shipping movements and this cause of the risk is best assumed collectively by the Government. There is a case however for ships that enter NZ waters for purposes other than conveyance of cargo (e.g. chartered fishing vessels, oil rigs and other industrial plant) and where the creation of biosecurity risk is clearly localised, to directly bear the costs of ensuring compliance.

Of the cost recovery mechanisms described, which would you support and why?

Keer-Keer: User-charging for second-inspections will be easier to sell to the industry than user charges for first inspections and avoid the suspicion of an administration empire building becoming a consequential result.

OCB: Prefers a standalone environmental levy, where the funds are identifiable and not able to be diverted to other issues.

ECHBCB: Supports a standalone environmental levy, or whichever mechanism is simpler to administer and requires the least paper work.

NZSF: Does not support a standalone environmental levy. A wide ranging levy would not necessarily directly impact on exacerbators.

SNZ: Does not support any environmental levy or other cost that can only result in costs being passed on to the end users.

WCCB: All other costs (i.e. those not related to second inspections) could be covered by extending the present Marine Safety Charge. This could be relatively easy to administer at a low cost.

EBOP: Would also like to see the creation of a new stand-alone environmental levy (recovered from the shipping industry) to fund the implementation of maritime environmental conventions, such as the Ballast Water Management Convention.

ANZ: Does not support either of the funding options as presented as neither option appears to entail specifically targeted recovery from such vessels. Vessels that do not contribute to the risk posed by ballast water should not contribute to its management. An accepted bedrock principle of environmental protection is “Polluter Pays”. That principle should be applied to this issue. There is no compelling reason for domestic vessels including the aquaculture fleet to contribute.

SeaFIC: The application of any form of cost recovery should be in the form of targeted narrowly focused user charges against those vessels that create the risk of introduction of unwanted organisms from ballast water or ballast sediments. SeaFIC does not support the use of generic levies against all vessels such as a Marine Safety Charge or a stand alone environmental levy. Such levies are unfair to the majority of New Zealand vessels that are not designed or constructed to carry ballast water.

MNZ: Notes the levy options set out in the paper, and considers the selection criteria would be satisfied by a discrete ballast water charge. MNZ would not favour any form of combined environmental levy, rolling in an HNS levy, for example.

Analysis of submissions

Overview

Ballast water is considered to present a significant risk to New Zealand's marine environment.

Invasive organisms introduced in ballast water could damage New Zealand's unique marine flora and fauna; introduced marine organisms are known to have significant adverse impacts on indigenous flora and fauna. Toxic micro-algae species introduced in ballast water could have serious adverse impacts on commercial, recreational, and customary use of the marine environment.

Keeping invasive marine pests out of New Zealand waters is regarded as the best way of protecting our unique coastal biodiversity. Introduced marine species are almost impossible to eradicate and their impacts are likely to be irreversible.

Stricter controls on ballast water discharges are considered more likely to reduce the risk of invasion by non-indigenous invasive species.

The Crown's obligations under te Tiriti O Waitangi to protect Maori interest in the marine environment were underlined, and active steps sought to protect *Nga Taonga Tuku Iho* (the treasures of the past).

The Options for New Zealand

Option 1 – Maintain the status quo

A number of submissions commented on the inadequacy of the existing controls on ballast water discharges, which were considered "the minimum necessary to provide some protection for the marine environment".

Not all ships were capable of carrying out ballast water exchange safely or effectively, but non-compliance with the requirements for exchange was undetectable and unenforceable. The process focus of the controls on ballast water exchange was likely to encourage token compliance; actions that appear to comply with the standard without actually achieving genuine risk reduction.

No submissions explicitly supported maintaining the status quo.

Are the risks to New Zealand's marine environment from ballast water discharges sufficient to warrant New Zealand introducing stricter control measures?

Numerous submissions answered this question in the affirmative (directly or indirectly), with the flavour of these submissions discussed previously in the *Overview*.

Option 2 – Make legislative amendments without becoming party to the Convention

This option would entail domestically giving effect to some or most of the Convention (without becoming party to the Convention). Any of the Convention's requirements that could not be met by New Zealand or we had reservations about meeting, would not need to be implemented, or could be implemented at a later time when any reservations have been resolved. Stricter requirements for managing ballast water could be introduced progressively, and could be implemented ahead of the Convention coming into effect.

Three submissions expressed a preference for this option.

In two of these submissions, this option was seen as a way of doing something now to strengthen ballast water rules, as it could be some considerable time before the Convention comes into effect. This option was also viewed as an interim step by two submitters that supported New Zealand becoming party to the Convention.

In the third submission, reservations were expressed about the operational effectiveness of newly developed ballast water treatment systems. Any requirement to use this new technology should be based on empirical evidence that these systems are robust, perform consistently over time and are effective at meeting the performance standard provided in the Convention. In light of these reservations, the submission recommends that New Zealand defer becoming party to the Convention, but give effect to the requirements of the Convention relating to ballast water exchange.

Reservations about specific requirement(s) of the Convention

The submission discussed previously was not the only one to express reservation about the application of newly developed ballast water treatment technologies. Two further submissions held reservations about this requirement of the Convention.

One of these highlighted concerns about the availability of approved ballast water treatment systems, and recommended that NZ should not at sign up to the convention this stage, but should review the status of ballast water treatment technologies in 2-3 years.

Another submission highlighted the three year (average) time lag between implementation of a vessel's construction contract and delivery of the ship, in the context the fixed deadlines in the Convention to comply with the performance standard. It proposes that the requirement to comply with the performance standard should apply to new ships delivered three years after MAF Biosecurity New Zealand has confirmed that the technology to comply with the standard is proven and commercially available.

Option 3 – Become party to the Convention

This option was widely supported, and the rationale for becoming party to the Convention was manifold:

- A greater level of protection will be achieved for the marine environment
- Application of ballast water treatment technologies will reduce the risk of organism survival
- Better compliance will be achieved by being party to a standardised international control regime, and the controls will be more enforceable
- Application of a performance-based standard is more likely to achieve genuine risk reduction
- Will enable New Zealand to better meet its international obligations and internal strategies
- Will enable New Zealand to demonstrate leadership on this issue, and contribute to the Convention coming into effect

It was also submitted that ships flagged to non-parties are unlikely to decline to come to New Zealand to avoid complying with the convention.

Should New Zealand impose additional stricter measures?

No submissions advocated for additional measures to that contained in the Convention. A number of submissions commented that there was no certainty around the effectiveness of the Convention. Regular monitoring of compliance and efficacy was considered necessary.

The outcome from such monitoring was, however, quite divergent; additional measures should only be considered where there is evidence that treatment systems are inadequate, through to new and higher standards could be considered as improved technologies become available.

The Best Option for New Zealand

The following is a summary of the preferences expressed in favour of the options for New Zealand in response to the Convention:

Option 1: Maintain the status quo, and not become party to the Convention	Nil
Option 2: Make legislative amendments without becoming party to the Convention	Four
Option 3: Become party to the Convention	Sixteen

Note: Two submissions did not express a preference in favour of any option, while one submission favoured two of the options.

Implementing stricter control measures for ballast water discharges

The approach to implementing the Convention's measures contained in the Discussion Paper of integrating activities into the existing functions of MAF Biosecurity New Zealand and Maritime New Zealand was favoured by many submissions. It was viewed as a pragmatic, least-cost, and logical approach, provided suitable capability is created and resourced within Maritime New Zealand. MAF Biosecurity New Zealand needs to retain overall leadership responsibility for ballast water policy.

One submission favoured developing new purpose-specific legislation to manage the risks of shipping including ballast water, as being easier than amending existing legislation. Another submission noted that creating standalone legislation still needs to have shared responsibilities between the agencies and therefore achieving changes to the different Acts may achieve the same outcomes.

The view was also expressed that it would be simpler if one agency dealt with ballast water throughout and under one Act; to avoid confusion within iwi/maori about the interaction of legislation currently in force.

Effects and costs of stricter control measures on ballast water discharges

Do the beneficial effects of stricter control measures outweigh the costs?

The ecological and economic costs of marine invasions cannot be overstated. The additional protection provided by stricter control measures will reduce the risk of introduction of harmful aquatic organisms, and the benefit of this is considered to outweigh any additional costs associated with compliance with the rules of the convention.

The means of funding stricter control measures on ballast water discharges; direct Government funding, or cost recovery from the shipping industry?

Some submissions favoured cost recovery from the shipping industry; as it is their responsibility to reduce harmful environmental effects of their business at their cost.

The shipping industry (and others) favoured cost recovery related to ship inspections where non-compliance has been identified (i.e. re-inspections).

It was also suggested that the beneficiaries of stricter control measures to protect the health of the aquatic environment, which would include a significant general public interest, should pay a share of the cost to government of these measures. Similarly, it was suggested that the cost of these measures should fall upon the creators of biosecurity risk, being those that drive the demand for shipping movements (cargo exporters) and this cause of the risk is best assumed collectively by the Government.

Cost recovery mechanisms

Some support was expressed for the creation of a new stand-alone environmental levy (recovered from the shipping industry) to fund the implementation of maritime environmental conventions, such as the Ballast Water Management Convention.

The shipping industry and other commercial stakeholders opposed the wide ranging levy options discussed (i.e. a stand-alone environmental levy or a Marine Safety Charge); as not necessarily likely to directly impact on exacerbators. Such levies would be unfair to the majority of New Zealand vessels that are not designed or constructed to carry ballast water.

It was proposed that any form of cost recovery should be in the form of targeted narrowly focused user charges against those vessels that create the risk of introduction of unwanted organisms from ballast water or ballast sediments. User-charging for second-inspections received wide support, while a discrete ballast water charge might also satisfy these criteria. The issues with user charges for first inspections were also highlighted.

April 2008

Appendix: List of Submissions

Submission #	Person/organisation	Sector/interest
1	Department of Conservation	Central government
2	Cawthron Institute	Aquatic research
3	Te Ngaru Roa ā Maui Incorporated	Iwi
4	Robin Keer-Keer	Shipping
5	Wellington Conservation Board	Conservation/environment
6	Otago Conservation Board	Conservation/environment
7	Southland Conservation Board	Conservation/environment
8	NZ Shipping Federation	Shipping
9	Shipping New Zealand	Shipping
10	East Coast Hawke's Bay Conservation Board	Conservation/environment
11	Ngatiwai Trust Board	Iwi
12	Ministry of Fisheries	Central government
13	West Coast Tai Poutini Conservation Board	Conservation/environment
14	Glenice Paine	Iwi
15	Environment Bay of Plenty	Local government
16	Aquaculture New Zealand	Seafood industry
17	National Institute of Water & Atmospheric Research	Aquatic research
18	WWF-New Zealand	Conservation/environment
19	New Zealand Seafood Industry Council	Seafood industry
20	Maritime New Zealand	Central government
21	Pacific Institute of Resource Management	Conservation/environment