



PĀUA INDUSTRY COUNCIL



NZ ROCK LOBSTER INDUSTRY COUNCIL

Supplementary Submission to the Primary Production Committee on
the Fisheries Amendment Bill

7 July 2022

Pre-set decision rules – examples, issues and responses

Introduction

The Fisheries Amendment Bill includes provisions to enable the use of pre-set decision rules for adjusting sustainability measures such as Total Allowable Catches (TACs). The New Zealand Rock Lobster Industry Council (NZRLIC) and the Pāua Industry Council (PIC) strongly support the original policy intent of these provisions – that is, to enable the use of decision rules such as management procedures and harvest control rules (HCRs) to improve the management of New Zealand’s fisheries. However, we consider that the Bill does not give effect to the original policy intent. In our primary submission we recommend some changes to the drafting to improve certainty and encourage greater stakeholder confidence in the use of pre-set decision rules.

We are aware that several submitters have requested the Committee to delete or defer the provisions for pre-set decision rules, including the Environmental Defence Society (EDS), Environment and Conservation Organisation (ECO), Deep Sea Conservation Coalition (DSCC), Environmental Law Initiative (ELI), Good Fishing, Greenpeace, NZ Sports Fishing Council (NZSFC), Forest & Bird, and other groups and individual submitters. Many of these submitters appear to be uncertain about what a decision rule is or how it would work in practice. This is perhaps not surprising in light of the lack of detail in the Bill or explanatory material.

Therefore, for the assistance of the Committee, in this supplementary submission we:

- Outline what a decision rule is and how it operates using a real example; and
- Summarise and respond to the concerns identified by submitters who have opposed the amendments to enable the use of pre-set decision rules.

Using decision rules to adjust TACs: rock lobster example

Decision rules have been used since the 1990s in most New Zealand rock lobster fisheries, originally in response to the need to rebuild depleted stocks but more recently to maintain stocks at higher levels of abundance. For example, the earliest decision rules were used to successfully rebuild the CRA8 (Fiordland) stock to very high levels of abundance, and to rebuild and manage the volatile CRA7 (Otago) stock.

Decision rules are a key component of a package of measures referred to as a 'management procedure'. Each rock lobster management procedure includes:

- Management objectives, such as an agreed management target for a stock and the reference limits above which the stock needs to be maintained to ensure its long-term sustainability;
- Evaluation of alternative decision rules to select the decision rule that best meets the management objectives;
- A decision rule which specifies the annual management adjustment to achieve the management objectives for the stock; and
- Fisheries indicators (to reflect stock abundance) and monitoring programmes to track the indicators.

The performance of the decision rule is checked annually (using fisheries indicators) and a full scientific stock assessment of each stock is undertaken every four to five years to refresh the decision rule.

The decision rules are formulated through a comprehensive process – including detailed stakeholder engagement such as through the multi-sector National Rock Lobster Management Group – to arrive at the methodology that is used to adjust the TAC based on the indices generated from the monitoring of the stock. A key part of the process is to identify the target stock level. A large number of projections or evaluations are then undertaken to test various formulations of the rules for their performance. The core objective of the rules is to maintain the stock size within the target range. If the stock falls below that range, catch is reduced to an increasing extent to build the stock back to the target level. In the development of the management procedure, consideration can also be given to the wider environmental obligations under the Fisheries Act, including the environmental principles (s.9) and requirements to have regard to the interdependence of stocks (s.13). All this work is reviewed by the relevant Fisheries New Zealand science working group.

After the intensive process to design and confirm a rule, the specified information is applied on an annual basis using the methodology to provide the suggested adjustment to the TAC. This means that the annual process can be faster and less resource intensive. The performance of the rule is monitored on an annual basis, but the rule will generally remain in place for a period (3-5 years) unless it shows signs of not responding correctly to achieve the management target.

Decision rules are not perfect, and management of rock lobster fisheries is challenging because of factors such as environmentally driven fluctuations in recruitment strength. Nevertheless, decision rules are a substantial benefit in this situation because they allow for responsive annual management. Prior to the wide use of decision rules in lobster fisheries it was usual, because of the resource intensity of the process, to review only one or two stocks a year, with each stock having a full assessment and review approximately every five years. With decision rules, we have the potential to review most of the nine stocks on an annual basis.

General response to issues raised in submissions

Most of the concerns that are raised by submitters (e.g., poor fisheries information, single stock management) are not unique to the use of decision rules, but apply equally to the adjustment of TACs using current approaches such as one-off stock assessments.

The submitters acknowledge certain attributes of decision rules (e.g., the shift to consulting when the rule is made, rather than every year when the TAC is adjusted) while ignoring other attributes. Decision rules are not only about making sustainability decisions in a more timely and responsive manner – they also result in higher levels of certainty for everyone with an interest in the decision, shift fisheries management to a more strategic basis, make better use of the information that *is* available, and help depoliticise decision-making by ensuring decisions are made using pre-agreed technical rules rather than sectoral lobbying. The process for developing decision rules – if conducted properly – helps to reconcile sectoral interests and brings fisheries sectors together with a common objective and strategy for a fishery. It is hard not to draw the conclusion that some submitters prefer a TAC-setting environment in which there is uncertainty and scope for tactical lobbying, in preference to the more collaborative, strategic and disciplined environment that exists when a decision rule is in place.

The submitters also seem unaware of the extensive, long-standing domestic and international use of decision rules (including HCRs, management procedures, and other similar rule-based approaches) as a well-recognised element of best practice fisheries management. They focus on the relatively few occasions where CRA decision rules have been reviewed or removed, while ignoring the large majority of TAC decisions, over more than two decades, where the decision rules have operated effectively to ensure that rock lobster remains New Zealand's most highly valued inshore fishery.

Internationally, decision rules and equivalent rule-based processes are widely used to manage fisheries in leading fisheries jurisdictions including Norway, Iceland, Alaska and other jurisdictions in North America, Australian states and some Regional Fisheries Management Organisations.¹

Specifically, HCRs are:

- Endorsed by the FAO as a mechanism for implementing an ecosystem approach to fisheries;²
- A requirement of Marine Stewardship Council (MSC) certification for sustainable fisheries;³
- Promoted by international ENGOS such as the Pew Trust, which states that: *Harvest control rules provide more benefits than the traditional approach of conducting stock assessments and then negotiating fishing limits or quotas. Pre-agreed management actions taken in response to stock status indicators increase the efficiency and transparency of management. They also help avoid costly and difficult political negotiations.*⁴

¹ Regional Fisheries Management Organisations (RFMOs) manage fish stocks such as tuna species that straddle multiple national jurisdictions and the High Seas.

² UN Food and Agriculture Organisation (FAO) [here](#)

³ MSC [here](#)

⁴ Pew Trusts [here](#).

Responses to specific concerns raised by submitters

Lack of consultation: A TAC can be adjusted without consultation if a pre-set decision rule is in place, reducing opportunities for stakeholders and the public to have input into fisheries management decisions (EDS, DSCC, ELI, Greenpeace).

Response

- An identical statutory consultation requirement applies to the making of a decision rule as applies to the setting of any other sustainability measure under the Act (**new s.12**) – the only difference is that consultation occurs when the rule is set, rather than when the rule is applied on an annual basis.
- Streamlining decision processes is one of the intended benefits of pre-set decision rules and full annual consultation on application of the rule would defeat that purpose (it would also undermine the certainty that decision rules are intended to provide).

Weakened sustainability requirements: Many considerations in Fisheries Act s.11 for the setting of sustainability measures do not apply to pre-set decision rules (EDS, DSCC, NZSFC). The changes to s.13 enable stocks to be managed at lower levels for longer (ELI). A pre-set decision rule weakens requirements to ensure sustainability (Good Fishing, NZSFC).

Response

- The s.11 requirements explicitly apply to pre-set decision rules – when making a rule, the Minister must comply with s.11(1) to (2A) as if the Minister were setting a sustainability measure for the stock or area (**new s.11AAA(2)**).
- NZRLIC and PIC agree that decision rules should be consistent with the purpose and principles of the Act and all relevant statutory requirements for sustainability measures – not only those in s.11 but also all the criteria and requirements in sections 13, 14A, 14B and 20. We recommend an amendment to **new s.11AAA** to require the Minister to be satisfied that the decision rule is consistent with all the relevant statutory requirements (*see NZRLIC PIC submission paragraphs 19 and 23*).

Information is too poor to allow the use of decision rules: The Act should not empower the making of decision rules because current information on fisheries is too poor (EDS, DSCC, Greenpeace). Decision rules rely on catch per unit effort (CPUE) which is not a reliable measure of stock abundance (EDS, ELI, Good Fishing, NZFCF).

Response

- This concern is not unique to decision rules – issues about the quality of information (including the use of CPUE) must be taken into account irrespective of whether a TAC is adjusted using standard one-off stock assessment or a decision-rule.
- The Fisheries Act requires decision makers to base decisions on the best available information and be cautious when information is uncertain, unreliable, or inadequate (s.10) – these principles apply equally to decision rules.
- Decision rules make use of a range of different types of information inputs, which may or may not include CPUE and other sources of information.
- No-one is suggesting that decision rules are appropriate for all stocks all the time – however, the management of fisheries that do have high quality information (e.g., rock lobster, pāua)

can clearly be improved by the use of decision rules, as has been demonstrated in New Zealand and internationally.

- Although most of the development of decision rules has been for high value, data-rich stocks there is considerable potential to use decision rule approaches to improve the management of low information stocks where a decision rule may enable better management outcomes than an absence of assessment and management.⁵
- The Bill seeks to ‘future proof’ the Fisheries Act and more fisheries will be able to make use of pre-set decision rules as information improves and as rule-based approaches are developed for low information fisheries.

Too much Ministerial discretion/lack of guidance: The Bill provides no statutory guidance on the basis on which the “approved range or limits” would be set or what stock management objectives or information standards should apply (EDS).

Response

- NZRLIC and PIC agree that the Bill, as drafted, does not contain sufficient guidance on *how* the Minister would adjust a TAC or other sustainability measures under a pre-set decision rule. The requirement that the TAC must simply be set within a range or limits provides excessively wide discretion to the Minister and erodes the certainty that decision rules are intended to provide. We therefore recommend that a pre-set decision rule should also include an approved methodology (such as a harvest control rule) to make it clear *how* the decision will be made within the approved range or limits (*see NZRLIC PIC submission paragraph 19 and associated recommendations in paragraphs 25 and 30*).
- A requirement to approve a “methodology” (including agreed management objectives and limits, as well as agreed information sources and methods of analysis) would increase stakeholder confidence in the use of decision rules.

Enduring nature of decision rules: The Minister is able to make and apply decision rules for a potentially indeterminate period (EDS). If a decision rule is set then new information cannot be responded to (ECO, DSCC). A rule should be immediately replaced or revoked if it is unsuitable (EDS).

Response

- Decision rules allow for more timely adjustments of TACs than the *status quo* – i.e., the Minister is currently able to set a TAC that applies for an indeterminate period without being reviewed or adjusted whereas decision rules allow annual adjustments.
- Under the Bill the Minister has very wide discretion to amend, replace or revoke a decision rule (**new s.11AAA**).
- The Minister must consult before amending or replacing a decision rule (**new s.11AAA**) and NZRLIC and PIC recommend that the Minister should also be required to consult prior to revoking a rule (*see NZRLIC PIC submission paragraph 28*).

Prioritising utilisation: Decision rules could be developed to favour commercial interests and prioritise utilisation over sustainability (EDS).

⁵ See for example, Bentley & Stokes 2009 [here](#)

Response

- Decision rules could also potentially be developed to favour non-commercial interests (see comments on allocation below).
- However, it is not possible to “prioritise utilisation over sustainability” while still complying with the purpose and scheme of the Fisheries Act. The Minister must always be guided by the purpose of the Act – i.e., to provide for utilisation while ensuring sustainability (s.8). This obligation applies irrespective of whether a TAC is adjusted using standard processes or a decision rule.
- Decision rules promote sustainability by acting to reduce TACs in a more timely manner than periodic TAC reviews.
- NZRLIC and PIC support the use of decision rules because they depoliticise decision making by ensuring that TAC decisions are strategic and based on technical information rather than favouring the short-term utilisation interests (or non-utilisation interests) of particular parties.

No independent review: An operative decision rule (and any related instrument) should be evaluated by an independent scientist on an annual basis (EDS). The Minister should be required to consider a request by any person or organisation to review a pre-set decision rule (EDS). The Minister of Conservation should have a concurrence role in sustainability measures and there should be a right to appeal a decision rule to the Environment Court (Forest & Bird).

Response

- Opening up decision rules for constant review defeats the intent of decision rules (i.e., improved certainty). But, as noted above, the Minister has wide discretion to amend, replace or revoke a rule if necessary.
- As with any other sustainability measure, the outputs of decision rules are reviewed on an annual basis through Fisheries New Zealand’s fisheries assessment working groups (FAWGs), which provide for wide participation from scientific experts. For example, the rock lobster FAWG includes around 20 scientists from Fisheries New Zealand, NIWA and independent science providers. In the plenary, three different independent scientists are invited to review the work undertaken by the FAWG.
- The Minister of Conservation and the Environment Court do not have responsibilities for setting TACs or other sustainability measures under the Fisheries Act, and decision rules are simply an alternative tool for making these decisions. The two suggested new roles are not consistent with the policy intent of enabling fish stocks to be managed in a more timely and responsive manner. They add no substantive considerations to decision making that are not already required to be considered by the Minister of Fisheries under the Fisheries Act.
- Judicial review remains available as an option for parties who consider that a decision rule is not consistent with statutory requirements.

Not consistent with ecosystem based management: Pre-set decision rules entrench single stock management and low stock sizes and do not move towards ecosystem based management (ECO, ELI, Greenpeace, LegaSea, NZFCF).

Response

- Decision rules are subject to the same statutory requirements as other sustainability measures, including the Act's environmental principles (s.9), stock management targets, and requirements to have regard to the interdependence of stocks (s.13). The Prime Minister's Chief Science Advisor found that the Fisheries Act is consistent with an ecosystem approach to fisheries.
- There are international examples of harvest control rules that take explicit account of ecosystem interactions and the FAO has endorsed harvest control rules as a mechanism to implement an ecosystem approach to fisheries.

Treaty considerations: Pre-set decision rules will undermine the legal expression, protection, and recognition of the continued exercise of mana in relation to nga rohe moana. The Minister will no longer have to comply with s.21(1), which allows for Māori customary non-commercial fishing interests (Nga Hapu o Ngati Porou). The rules will override the Minister's obligations to take into account or have regard to commercial fisheries levies, fisheries plans (including customary fisheries plans), and planning documents lodged by customary marine title groups recognised under the Marine and Coastal Area (Takutai Moana) Act (Nga Hapu o Ngati Porou, TOKM).

Response

- The Bill requires that if a decision rule is used the Minister must set allowances for customary non-commercial fishing (and recreational fishing), but is not required to consult on those allowances (**new s.20(6)**). NZRLIC and PIC agree with the submitters that this is unacceptable. We recommend an amendment to ensure that decision rules should (a) always operate at the level of the TAC and (b) include rules about how the TACC and non-commercial allowances would be set (noting that the decision rule itself is subject to consultation under s.12 of the Act). If a decision rule does not include rules about allocation, then the Minister should always be required to consult before making any allocation decisions (*see NZRLIC PIC submission paragraphs 33 to 35*).
- Aside from the point about consultation on allocation, pre-set decision rules are subject to the same statutory obligations with respect to Treaty considerations (and all other requirements) that apply to any other sustainability measures under the Fisheries Act.
- The Minister is explicitly required to comply with s.11(1) to (2A), including requirements to take into account an approved fisheries plan and have regard to provisions of a Marine and Coastal Area (Takutai Moana) Act planning document (**see new s.11AAA(2)**).

Proportional allocation of TAC: Decision rules are a sneaky way to restrict recreational fishing to a proportional allocation of the available catch (LegaSea, NZSFC).

Response

- Decision rules do not require or favour proportional allocation of the TAC.
- The Fisheries Act provides the Minister with extremely wide discretion about how the TAC is allocated, and this discretion applies equally to rules about allocation in any approved decision rule.
- Allocation in a stock that is managed under a decision rule need not be proportional – e.g., the rule could specify that in response to declining stock abundance, the TACC will be reduced but the recreational and customary allowances will remain the same.

- In essence, recreational fishing submitters are objecting to the certainty that decision rules will provide about allocation (they appear to prefer a regime in which sectoral interests are free to lobby the Minister for a greater share of the catch every time a TAC adjustment is made).

Abdication of discretionary power: Pre-set decision rules are highly unorthodox and seek to violate the fundamental administrative law tenet that a statutory decision maker must not abdicate their discretionary power by adopting a fixed rule of policy (NZSFC).

Response

- Pre-set decision rules are not unorthodox – they have been used in New Zealand for decades, and are widespread in leading international fisheries jurisdictions, as noted above.
- The Minister has broad discretion to amend, replace or revoke a rule (**new s.11AAA**) and exercises all relevant discretionary powers when approving the rule.

CRA2 and other examples: The decline of the Hauraki Gulf rock lobster fishery (CRA 2) demonstrates that decision rules are dangerous and should not proceed (EDS, ECO, DSCC, ELI, Greenpeace).

Response

- Some historical context is necessary to understand the CRA2 situation and the implications for decision rules. By 2017 it was clear the CRA2 stock was declining. Because of their concern about the stock, the operators in the area had already voluntarily not fished 25% of their catch entitlements in 2016 and 2017 (at a cost of around \$8m in forgone revenue). Fisheries New Zealand brought forward a full stock assessment and in April 2018 the TACC was reduced by 60% from 200 to 80 tonnes.
- NZRLIC commissioned an independent review by NIWA to investigate why the stock assessment and associated decision rule had allowed this situation to arise. The NIWA review identified some issues with the stock assessment, but a primary cause was that recreational and illegal catch were overestimated in the previous 2013 assessment. The incorrect estimates of recreational and illegal catch led the science team to overestimate the productivity of the stock. Therefore, instead of correcting the decline in the stock, the decision rule allowed it to decrease further.⁶
- The CRA 2 stock is now rebuilding rapidly. The November 2021 rapid update assessment shows CPUE has nearly doubled and the vulnerable biomass has rebuilt to the Bmsy based reference level and is projected to keep increasing.
- The CRA2 example illustrates that comprehensive and reliable fisheries information is important for good decision making, irrespective of whether a TAC is adjusted by annual stock assessments or by a multi-year decision rule.
- Submitters suggest that “moving to a process of gazetting details of catch limits in line with the pre-set rules would have seen this fishery continue to collapse”. This is clearly incorrect – under the Bill if concerns are raised about a pre-set decision rule (including concerns about input information or outputs that do not align with ‘on the ground’ observations made by fishers) then the Minister can amend, replace or revoke the decision rule and make a TAC decision in the standard way (as occurred in the case of CRA2).

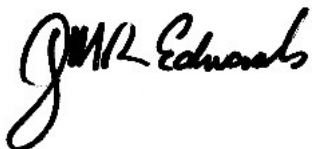
⁶ CRA 2 Review, M Dunne, NIWA, August 2018.

- Decision rules have operated successfully for many years to rebuild and maintain most rock lobster stocks at high levels of abundance, as discussed above. Since the species was introduced into the QMS in 1991, catch across New Zealand’s lobster fisheries has been stable overall at around 2,700 tonnes, but CPUE or standardised catch rate has increased by 330% – reflecting a substantial increase in abundance across that period.
- Some submitters also identified scallop fisheries as examples of failed decision rules. No New Zealand scallop fisheries have been managed using decision rules.⁷

Separate the pre-set decision rules from the rest of the Bill. Pre-set decision rules should be separated from the Bill because they were not consulted on and are nothing to do with cameras (NZSFC) or should be deferred until after a broader review of the Act’s sustainability provisions (Forest & Bird) or a review of the non-statutory Harvest Strategy Standard (EDS, ECO, ELI, DSCC).

Response

- Pre-set decision rules are not new – they have been used in New Zealand fisheries for decades and the formalisation of this management approach was consulted on by Fisheries New Zealand in *Your Fisheries Your Say* (2019).
- The Bill is not “just about cameras” – it provides a range of amendments intended to update the fisheries management regime. Many of these changes, including the use of pre-set decision rules, are intended to take advantage of the enhanced information on commercial fishing that is has been available since 2019 as a result of the introduction of electronic reporting and monitoring.
- The Fisheries Act has been subject to numerous recent internal and external reviews⁸ – all found that the Act provides for and is compatible with an ecosystem approach to fisheries, and none identified any need to review or amend the Act’s core sustainability provisions.
- The Harvest Strategy Standard is an (outdated) Fisheries New Zealand policy, not a matter for the Bill or the Select Committee to consider.



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⁷ Commercial fishers in the Coromandel scallop fishery voluntarily developed catch spreading arrangements (within the TACC) in order to protect scallop beds.

⁸ Internal: 2015/16 Operational Review of Fisheries Management; 2016/17 Future of our Fisheries; 2019 Your Fisheries Your Say. External: 2020 PM’s Chief Science Advisor’s report; 2017 The Nature Conservancy.