



Hoki – summary of risk profile recommendations and subsequent actions

In 2010, the then Ministry of Fisheries began a new approach to monitoring compliance in the deepwater and middle-depth fisheries. The approach was based on proactive profiling of specific fisheries rather than the reactive investigation-driven approach of the past. The four components of profiling comprise i) an initial desktop exercise to compile available data, ii) a detailed data and information collection programme primarily involving observers and fishery officers, iii) an analytical phase which analyses all available data to inform the report and iv) an outcomes phase using the VADE model.¹

The hoki fisheries on the West Coast of the South Island and Chatham Rise were the first to be profiled, with most of the data and information collection programme being undertaken during winter 2011. The main focus of data collection related to issues that could impact the accuracy of reported greenweight.

The report containing the results of the winter 2011 data and information collection programme and analysis was released in 2012. The 2012 internal report contained 44 recommendations that, for the purposes of the report, were grouped under five broad headings.

1. Re-categorisation of recommendations

In reviewing the 44 recommendations, Fisheries New Zealand has re-categorised them into the following groups. The number in brackets refers to the number of recommendations in each category:

- On-board practices (14)
- Suggestions for changes to reporting and recordkeeping obligations (6)
- Fishing practices (3)
- Fisheries management processes (13)
- Compliance processes (8)

1.1 Recommendations relating to on-board practices (14)

This group of recommendations related to a series of fleet-wide, on-board practices, most of which have the ability to impact the accuracy of greenweight reporting of all species, not just hoki. For this reason, this group of recommendations has been the subject of ongoing follow-up and monitoring ever since the report was completed.

Some of this group of recommendations were generic while others related to how an individual vessel or company dealt with or approached specific issues. A summary of follow-

¹ VADE means voluntary, assisted, directed, enforced



up activity that took place either with individual companies or collectively with vessel operators, is provided as Annex 1.

Glaze deduction (recommendations 6 and 23)

Before frozen product is packed, it is frequently glazed to prevent freezer burn. The process involves applying water to product after the initial freezing process (e.g. plate freezers) but before the product is packed and stored in the hold. Some of the water freezes on contact with the frozen fish and acts as a protective layer.

The consequence of applying glaze is that it adds additional weight to the product. At the time the report was written, it was common practice for companies to apply a standard 2% glaze deduction. That is, 2% was deducted from the average container weight regardless of how much glaze was actually applied.

Since 2012, MPI has worked with vessel operators to ensure that they have robust on-board practices for testing and documenting how much glaze is applied. Fisheries New Zealand observers undertake independent glaze testing at times and monitor vessel's glaze testing processes. Glaze records are available to Fishery Officers on request.

A standard 2% deduction is no longer acceptable and any deduction from glaze must be evidence-based. For the vessels that have Compliance Plans (foreign-owned vessels), audits of those plans have confirmed that permit holders are maintaining records to support any glaze deduction.

Fish to meal quantification (recommendations 22 and 40)

Most factory vessels have on-board fish meal plants, which provide a means of obtaining value from both unwanted and damaged fish and the remaining parts of processed fish (heads, frames, skins etc). On these vessels, there are several different parts of the factory that can provide a source of fish that goes to meal.

Since 2011, MPI has worked with vessel operators to ensure that they have identified all sources of fish to meal and that they have developed robust, auditable processes for documenting how fish to meal is quantified for each of those sources. Fisheries New Zealand observers routinely monitor adherence to vessel processes.

Accuracy of product weight (recommendations 7, 9, 10, 11, 13)

All fishers are required to report the weight of fish as greenweight (the weight of fish before any processing commences and before any part is removed). Fishers are allowed to do this retrospectively by multiplying the weight of processed fish by a conversion factor.²

The issue of having strong product weight processes both at-sea and on land is critical as a small amount of under-reporting on a per-unit basis can translate to several tonnes per trip.

² A conversion factor is a number that a particular fish processed to a specific state must be multiplied by to derive greenweight.



This is particularly relevant in circumstances when a fishing vessel produces several thousand containers of a particular product type during a trip.

Since 2011, MPI has worked with vessel operators to ensure that both at-sea weighing systems and on-land quality control processes are such that product weights are determined as accurately as possible. Additionally, Fisheries New Zealand observers routinely undertake independent product weight testing at sea, while Fishery Officers audit product weights during routine inspections.

Discarding (recommendations 8, 12, 38 and 42)

The recommendations relating to discarding primarily related to vessels that were foreign charter vessels. Since 2012, all such vessels have been subject to mandatory observer coverage requirements, and a high proportion of these foreign vessels have left New Zealand waters.³

One recommendation related to an incident on a specific vessel. The outcome of that recommendation was a change to a landing report to report an increased quantity of fish accidentally lost at sea.

Product labelling (recommendation 24)

This recommendation related to the accuracy of product labelling i.e. that product labelled as containing a particular grade must contain fish of that grade. Vessel operators have been reminded of this obligation regularly ever since the report was released.

1.2 Recommendations relating to reporting and recordkeeping obligations (6)

The 2011 report made several recommendations (numbers 1, 14, 15, 16, 18 and 26) relating to vessel operators' reporting and recordkeeping obligations. Most of these recommendations were not specific to the hoki fishery and reflected the desire of the report's authors for enhancements to the reporting and recordkeeping obligations that applied at the time. The recommendations did not highlight any areas where the information required to be recorded by fishers was inadequate for management purposes. No changes to reporting or recordkeeping regulations were progressed as a direct result of the recommendations. However, some issues were followed up directly with vessel operators. Outcomes of the follow up included clarification of reporting obligations and arrangements to make additional information available to MPI on request.

1.3 Recommendations directed at fisheries management (13)

A number of recommendations were directed at fisheries management and covered a range of topics, many of which were not specific to the hoki fishery.

Hoki management areas (recommendations 3, 20, 21 and 44)

³ In 2016 an amendment to the Fisheries Act 1996 came into force that required all foreign-charter vessels to become New Zealand flagged. As long as the vessels remained foreign-owned, the mandatory observer coverage requirement continues to apply.



Hoki Management Areas (HMAs) are a Deepwater Group initiative to manage and monitor fishing effort in defined areas where there is a relatively high abundance of juvenile hoki. Within HMAs, operators of trawlers >28m in length are to refrain from targeting hoki. Since 2009, Fisheries New Zealand has been auditing vessel performance against the HMA Operational Procedures and providing quarterly reports to the Deepwater Group.

The HMA Operational Procedures are a voluntary fishing industry initiative, as opposed to a regulatory measure under the Fisheries Act 1996. This means that although Compliance may choose to monitor adherence to the Operational Procedures, no directed or enforced action can be taken if fishers are found to be breaching the Operational Procedures.

At the time the report was released, Fisheries Management was satisfied that the existing processes relating to monitoring fishing effort in HMAs were fit for purpose. Quarterly reports continue to be provided to the Deepwater Group, which undertakes follow-up action if a vessel operator is behaving in a way that is inconsistent with the HMA Operational Procedures.

Vessel specific conversion factors (recommendation 17)

The Fisheries Act 1996 provides for conversion factors to be issued on a vessel-specific basis. The provision is most often used by the hoki fillet vessel fleet.

Although not a direct outcome of the 2011 Hoki Risk Profile Report, the process by which vessel specific conversion factors are managed was amended in 2015. Key changes to the process include:

- i) Fisheries New Zealand observers are tasked with undertaking conversion factor testing any time they are on a vessel for which the operator has been issued a vessel specific conversion factor certificate. Previously, testing was only carried out on dedicated conversion factor sampling trips, which may not have been representative of processing; and
- ii) Vessel operators must account for all trimmings, which reduces the incentive to trim more lightly during conversion factor testing

Other topics in this category of recommendations included:

- Considering adding hoki to Schedule 5A of the Fisheries Act 1996 meaning that the provisions allowing annual catch entitlement (ACE) to effectively be carried forward from one fishing year to the next would not apply (*recommendation 25*).

This recommendation was not considered by Fisheries Management as hoki did not meet the policy criteria for addition to this schedule i.e. hoki is not a high-value, single-species fishery.

- Species identification / use of generic shark codes (*recommendations 29 and 30*)



Vessel operators have been reminded of the obligation to ensure accurate species reporting regularly ever since the report was released. The issue of reporting of shark species, and trying to reduce the use of generic species codes, has been included in the Deepwater Fisheries Management's Annual Operational Plan since 2011/12

- Direct access to observer data (*recommendation 34*)

Observer data has always been available to staff within fisheries management and compliance on request or, more recently, directly via a database access tool.

- Discrepancy reporting (*recommendation 35*)

Although not a direct outcome of the report, there has been ongoing development of automated discrepancy reports since a new reporting tool became available in 2012.

- Mobile LFR status should not be applicable to fishing vessels (*recommendation 36*)

No action was taken to give effect to the recommendation that fishing vessels should not be given mobile Licensed Fish Receiver status. No vessels known to fish for hoki currently have mobile LFR status.

- The allowance within the Total Allowable Catch for other sources of fishing-related mortality should be commensurate with estimates of highgrading for the West Coast South Island hoki fishery (*recommendation 37*)

Within the Total Allowable Catch (TAC), the Minister of Fisheries includes an allowance for all other sources of fishing-related mortality (OSFRM). This allowance is intended to provide for fish mortality that is not reported including loss due to burst nets or intentional discarding.

For hoki, the approach taken since 2004 has been to set this allowance at 1% of the total allowable commercial catch (TACC). This means that under the TACC of 150,000 tonnes that was set on 1 October 2015, the OSFRM was set at 1,500 tonnes.

Fisheries Management accepts the desirability for a more informed OSFRM allowance to be included within the TAC and will be actively considering how best to give effect to this principle during future TAC reviews.



- Develop fact sheet on highgrading (*recommendation 43*)

Vessel operators have been regularly reminded of the obligation to report all fish they catch ever since the report was released.

1.4 Recommendations relating to fishing practices (3)

The report contained three recommendations regarding the development of codes of practice: development of a West Coast South Island (WCSI) HMA (*recommendation 2*); a reduction on long tows (*recommendation 4*); and reducing the practice of “soaking nets” (*recommendation 5*)⁴.

The development of a WCSI HMA was never progressed as the area is generally a spawning area, and therefore is not recognised as being an area with high abundance of juvenile hoki.

Regarding the other two recommendations, these fishing practices are not, in themselves, inconsistent with regulations and are not a compliance risk. They may, however, lead to compliance risks as, for example, long tows may result in higher quantities of damaged fish and soaking nets implies that the vessel is catching fish at a higher rate than it can process. In both examples, the compliance risk is that damaged fish, or fish that is in poor condition after spending an extended period of time in the pounds, will be illegally discarded. Vessel operators have been regularly reminded of the need to ensure fishing strategies minimise damage to hoki ever since the report was released.

1.5 Recommendations relating to compliance processes

The report contained 8 recommendations (*numbers 19, 27, 28, 31, 32, 33, 39 and 41*) that related to business processes within MPI Compliance.

No specific training for Fishery Officers on identification of non-compliance with fillet state definitions was undertaken (*recommendation 19*). Although not a direct outcome of the 2011 Hoki Risk Profile Report, the changes to the vessel specific conversion factor process (as outlined in the earlier discussion on recommendation 17) meant that operators of fillet vessels could pack fillets in any form they wished, provided all parts of a fillet were accounted for.

Recommendations 27 and 28 related to aspects of the functionality of an electronic catch effort reporting tool that was never developed.

Recommendation 31 related to accurate reporting of fish going to meal. One component of this recommendation, developing techniques for quantitative speciation of fish to meal, has been investigated but has proven problematic. The other component of the recommendation, engagement with vessel operators has been progressed, with operators being requested to document and submit vessel procedures relating to the quantification

⁴ The term “soaking nets” refers to the practice of lifting the trawl net off the bottom and away from fish, and towing the net until such time as sufficient factory space becomes available to process the catch.



and reporting of whole and processed fish to meal. Currently, procedures are periodically verified and audited by Observers and Fishery Officers.

Inshore and “fresher” vessels have not been included in the hoki profiles (*recommendation 32*), however some monitoring of the inshore fleet has occurred since 2012 and future monitoring has been planned.

Vessel inspection templates continue to evolve (*recommendation 33*) to ensure information is gathered in a consistent manner and have been used as a guideline in subsequent hoki inspections since 2012.

Recommendations 39 and 41 related to HMAs and investigating non-compliance with fisheries legislation by vessels fishing in those areas. Any evidence of non-compliance with legislation, including the specific aspects of non-compliance identified in those recommendations, is investigated by MPI regardless of where a vessel is fishing and appropriate action taken where necessary.



Annex 1. Summary of vessel operator / MPI Compliance meetings and other follow-up actions

Date	Activity	Discussion Points
16/3/2012	Industry Update on progress	2011 HOK Profile
13/6/2012	Industry Briefing Christchurch	2011 HOK Profile
14/6/2012	Industry Briefing Nelson	2011 HOK Profile
22/6/2012	MPI Risk Management & Compliance Memo	Identifies HOK compliance risks to be mitigated for the 2012 season
22/6/2012	One on One with company A	2011 HOK profile –issues relating to company A vessels
29/5/2013	Industry Briefing Christchurch	2012 HOK & SBW profile
7/6/2013	MPI Risk Management & Compliance Memo	Identifies HOK compliance risks to be mitigated for the 2013 season
26/6/2013	One on One with company B	2012 HOK & SBW profile –issues relating to company B vessels
27/6/2013	One on One with company C	2012 HOK & SBW profile –issues relating to company C vessels
27/6/2013	One on One with company A	2012 HOK & SBW profile –issues relating to company A vessels
8/8/2013	One on One with company D	2012 HOK & SBW profile –issues relating to company D vessels
8/8/2013	One on One with company E	2012 HOK profile –issues relating to company E vessels
11/12/2013	Deepwater Group / MPI Compliance Group meeting, Wellington	The agenda items included risk profiling.
17/2/2015	Deepwater Group / MPI Compliance Group meeting, Wellington	The agenda items included risk profiling.
2/5/2015	MPI Risk Management & Compliance Memo	Identifies HOK and SBW compliance risks to be mitigated for the 2015 season
17/6/2016	MPI Risk Management & Compliance Memo	Identifies HOK and SBW compliance risks to be mitigated for the 2016 season
18/2/2016	Deepwater Group / MPI Compliance Group meeting, Wellington	The agenda items included risk profiling
8/6/2017	Deepwater Group / MPI Compliance Group meeting, Christchurch	The agenda items included risk profiling
13/6/2018	Deepwater Group / Fisheries New Zealand Compliance Group meeting, Christchurch	The agenda items included risk profiling



20/6/18	MPI Risk Management & Compliance Memo	Identifies HOK and SBW compliance risks to be mitigated for the 2018 season
---------	---------------------------------------	---

Appendix II: Summary of prosecutions

Vessel (x defendants)	Dates of offending (Year convicted)	Total Fines	Amount of fish illegally discarded (as per Court's decision)	Vessel forfeited
Vessel A (3 x defendants)	May to July 2007 (convicted 2009)	\$147,500 + costs of \$140,111.67	'At least 12 tonnes was discarded but likely much more than this. From the estimates given (and whether it was 12 or 50 tonnes) there was substantial quantities.' (primarily Hoki)	Yes.
Vessel B (5 x defendants)	March to June 2011 (convicted 2012)	\$524,500	347 tonnes of ITQ fish species (including Hoki)	Yes...Vessel owner in memo to Court has agreed to pay \$750,000 relief from forfeiture. This is delayed due to a third party currently taking action on behalf of Indonesian crew.
Vessel C (1 x defendant)	December 2010 to October 2011 (convicted 2014)	\$127,500	74 tonnes ITQ fish (primarily Hoki)	Yes...Vessel owner in memo to Court has agreed to pay \$525,000 relief from forfeiture.
Vessel D (2 x defendants)	June 2012 and January 2013 (convicted 2014)	\$111,140	120 tonnes of hoki over seven trips	Yes...\$145,428.41 paid by company as relief from forfeiture
Vessel E (3 x defendants)	2011 (convicted 2015)	\$298,500	70-300 tonnes of Barracuda 200-500 tonnes Hoki	Yes...Company walked away from vessel. Vessel remained forfeited and was sold for scrap.
	TOTALS	\$1.349 million in fines	823,000kgs to 1,391,000kgs of ITQ fish	