

Deepwater Group Environmental Liaison Officer (ELO) Report for 2021-22 Fishing Year

Background

Over the past several years, Deepwater Group (DWG) has expanded its delivery of documented standards (Operational Procedures - OPs) to a much larger and more diverse range of vessels. Ling bottom longline, scampi and coastal hoki vessels now bring into the programme many smaller vessels with mostly owner/operators and many without fully adequate systems or management structures to manage mitigation and risk systems to levels required by the DWG OPs.

Due to increased emphasis on meeting the objectives of the NPOA – Seabirds (2020) ongoing concern regarding sea lions, increasing awareness of protected sharks and benthic concerns and with the increasing Government and public pressure for reducing protected species interactions, there is now even more need to ensure all vessel operators maintain a consistent and diligent approach to our OPs.

Overall Objectives of DWG's ELO Programme

- Visit at least 90% of the deepwater trawl fleet (including fresher, factory, and seasonal hoki), and all scampi and ling bottom longline vessels.
- To train senior crew and vessel managers
- Promote best practice mitigation standards across the fleet and review the DWG standards set out within the OPs.
- Audit Vessel Management Plans (VMPs) and best practice environmental and mitigation practices.
- Encourage improvement and effectiveness of fish waste control and mitigation device use and improve real-time reporting of the capture event.
- Be on call 7 days a week to respond to any multiple or trigger capture event reported by DWG vessels and reply immediately to gather further information and offer advice.

Annual Objectives

- Organise and deliver environmental training resources to the senior crew and associated managers. Target all SQU, JMA and SBW fleet for pre-season briefings.
- Monitor deepwater vessel operators' adherence to agreed environmental risk OPs.
- Maintain a fleet database of deepwater vessels, operators, target species, ports, skippers etc.

- Undertake port calls and vessel visits to a minimum of 90% of the fleet.
- Analyse all Fisheries New Zealand (FNZ) Observer audits of VMPs and OPs, contacting operators with feedback for each audit.
- Provide expert advice on vessel-specific options for fish waste management and warp mitigation systems and ensure this is documented.
- For SQU and SBW seasons, ensure the full fleet adheres to SLED audit programme:
 - Maintain an updated database of all SLEDs
 - Provide FNZ with a summary of all SLED certifications
 - Monitor in-season SLED damage, repairs, and re-certification
- Maintain strong liaison with government – particularly with FNZ, DOC and DOC's Inshore Liaison Officer Programme.
- Review VMPs, ensuring each vessel has an effective vessel-specific seabird risk management programme.
- Review and revise VMPs on scampi and hoki fresh fish fleet.
- Provide full induction into DWG programmes to new skippers and/or vessel operators who have moved to new fisheries or have started on new vessels.
- Support reviews and re-drafts of any OPs that require renewal.
- Produce an end-of-year summary report to DWG, FNZ and DOC.

2021-22 DWG Fleet (Vessels Targeting DWG Fish Stocks)

- 31 deepwater trawlers (> 28m) vessels – OPs and VMPs
 - 26 factory trawlers
 - 5 fresh fish & 3 *tied-up (full-time due to fuel prices)*
- 14 fresh fish hoki trawl (< 28m) Coastal Hoki – Coastal Hoki OP and RMPs
- 10 scampi vessels – Scampi OP and VMP
- 24 BLL (target FMA 2-8) – BLL OP
 - 5 auto line & 2 *others permanently tied up.*
 - 13 hand-bait (land > 4 tonnes) & 2 *others tied up.*
 - 6 hand-bait (target and land 2 to 4 tonnes) & 3 *others tied up.*
- 4 Ling Potting boats.

Total number of vessels: 83 (and 10 currently tied up for various reasons)

COVID-19 Affected the Programme Delivery

COVID travel restrictions and more particularly outbreak of omicron, made it very hard to visit some of the factory ships, with the larger three companies asking for me not to visit

vessels for up to half of this year. This meant that a few fewer vessels were visited this year than in previous years. The restrictions on travel also made it particularly difficult to visit ling vessels in the North Island. Most of the SQU fleet were visited between November and January, and about 90% of the JV vessels were visited in person. Many of the Coastal domestic trawl & BLL vessels were not able to be visited in person. Those which were not visited (approx. 30%) were reviewed over the phone.

Pre-SBW season, the vessels I could get to locally were visited with the rest done by phone. *(I note the FNZ Audit of the fleet's performance to all requirements was very good, so the process was still effective).*

Other issues around Program Delivery

Most of the bottom-line ling fleet is based in other ports away from Nelson (many also either tied up or for sale and many others are based in the North Island) travel to these ports was very difficult during the omicron-breakout period. The Scampi fleet was particularly hard to visit in 2021-22 with many of the fleet vessels often unloading in Bluff or Dunedin.

For much of the year, the domestic factory fleet (at the request of the fleet managers) was largely 'off-limits' due to COVID restrictions, restricting vessel visits during the first half of the year, although, when possible, the skippers were contacted via phone.

Bottom Long-line (BLL)

On 1 October 2021, FNZ introduced the new BLL Regulation and accordingly, DWG's documentation needed to reflect these changes. DWG updated the Ling BLL OP manuals and produced new VMPs/PSRMPs for the ling BLL fleet.

Most of the updates to VMPs were done by phone and email. The new Ling BLL OP was then sent out to each vessel operator.

Deliverables & Outputs Table 1: ELO Vessel Visits (including phone briefings)

	Vessel numbers	Vessel Contacted	No-Contact
Factory vessels	26	26	0
Fresh >28m	5	4	1
Fresh <28m	14	12	2
Scampi	10	4	6
Ling (auto line NZ)	5	4	1
Ling hand bait (+4T)	19	16	3
Potting	4	2	2
Total fleet	83	68	15
% of fleet visited		82%	18%

Notes:

- 27 of the 83 vessels visited, were visited at least twice during the year
- another 12 DWG Vessels (mostly BLL) were tied-up all year

- Due to Both Covid and company restrictions to travel, the scampi fleet was difficult to phone/brief. Hence very low coverage across the scampi fleet

Triggers

This year there were 41 protected species capture trigger-point events. This is a large increase over past years, driven by an unusually high number of fur seal multiple capture events in the Cook Strait & Pegasus hoki fishery.

Summary of Trigger events:

- Seabird - 8 trigger events
 - While the number of triggers is low, there was a few triggers with large numbers of multiple captures, driven by captures of white-chinned petrels in the ling fishery.
- Fur-seals - 21 trigger events
 - Mostly from Cook Strait hoki fishery and was approx. 3 times higher than in previous seasons. There were also a lot of triggers from the Pegasus fishery as well.
 - Before next season there will be meetings held with those operators responsible for the bulk of these trigger to try establishing why numbers were so high and if we can instigate any effective mitigation for next season.
- Dolphin - 5 trigger events (*total 10 Dolphins of the year*)
 - Overall, the numbers of captures were higher than previous years. Unusually there were six (6) Dusky/ DDO captures, with one 'unusual' large (4 DDO) multiple capture event in the BAR 1 fishery and two separate events in the Pegasus hoki fishery.
 - One JMA-7 tow, had three CDD captures.
- Sea Lions- 4 trigger events
 - One in SBW, one in Scampi, and two in SQU 6T fishery
- Basking sharks - 3 trigger events

Follow-up and communications occurred, most often on the same day or within 24 hrs, with vessel management or directly with the skipper. Occasionally, with more serious capture events, contact was made with the vessel owner and/or quota-permit holder to discuss issues and how further captures might impact the quota owner or vessel owner. The conversation and responses happen swiftly, often while events are unfolding.

After the event, corrective actions are carried out and changes made to VMPs and/or DWG OPs as required.

All capture event information plus any additional information requested from the vessel or MPI Observer Services is logged. On completion, a summary of events is recorded for DWG and FNZ.

Trigger information and feedback are used to inform vessel briefings, OP reviews and rewrites.

VMP / MMOP Observer Reviews

Analyse all FNZ audits of VMPs, MMOPs and OPs, contacting vessel operators with feedback for each audit as required. At times this requires follow-up with MPI Observer Services and/or advice to be given to vessel operators or changes to be made to VMP/RMP.

- 158 observer review forms were assessed, and summary/feedback reports were sent to each vessel operator. The number of observer reviews is slightly down on previous years. COVID is likely the main factor for the reduced observer trips, particularly on smaller/fresh fish boats.
- While there were fewer observer reviews completed, some of the factory vessels' observer reviews were for two, three or even four trips at a time, (four to five months on some vessels). Observers were staying longer onboard some vessels doing multiple trips (rather than travelling from boat to boat or home and being redeployed). This was again likely due to COVID.
- Information on each vessel voyage, with a list of any protected species captures, comment on offal control and mitigation is all recorded for each voyage and recorded into a summary sheet for DWG and FNZ.
 - 25 reviews (about 15%) had follow-up activity, mostly minor, about half of these were errors/mistakes in completing the form or the MPI observer misunderstanding of the vessel risk management systems or the DWG standards.
 - Three of those 25 reviews (2% of all reviews) required more follow-up action and response by DWG and the operator, corrective actions were required as vessel didn't meet some of the more important aspects of the VMP.

Note: FNZ will also review all VMP observer reviews and will separately advise how many required further action/follow up etc.

Positive outcomes

SBW and SQU 6T fisheries (sea lions)

- Excellent results again this year with adherence to the FNZ Sea lion Operational Plan and DWG OPs. Trigger reporting was completed where necessary, there was 100% adherence with SLED checks completed by fishery officers and observers, and 100% for pre-departure port notices for observer coverage placement.

- There were two (2) sea lion captures in squid season and one (1) in SBW this year, which is down on the last few years' averages.
- Of note, there were no BSK captures, in the squid fishery this season, (first time in many years) and only two (2) great-white shark captures.

SLED Pre-season Audit

For squid season, there were 75 SLED checks & check sheets issued pre-season. Fifteen of these SLEDs were damaged and repaired and re-checked during the season. In the SBW season another 30 SLEDs had pre-season checks.

All SLED check sheets approved and registered with FNZ for use for the SQU and SBW fleets. This involves monitoring the SLED checks and confirmation/approval to vessel operators and FNZ that each SLED meets specifications and is ready for use (i.e., check every SLED check sheet issued by the approved net sheds). All SLEDs were recorded into a summary sheet for DWG and FNZ. There were no instances where vessels failed to meet SLED specifications reported by FNZ observers or fisheries officers who checked them.

JMA Fishery and Common Dolphin (CDD) Captures

The BATM fleet has performed well in the JMA fishery this year and in recent years. Observer audit reviews have shown high adherence to the VMPs and Marine Mammal OP. The BATM fleet had nil captures in the last two years and only six in total in the last six years (10 to 15 years ago BATMs took 10 to 20 CDD per year)

In 2021-22 there were three dolphins captured in JMA 7 in a single multiple-capture event by a domestic trawler. This issue was reviewed, and some further mitigation has been proposed by the operator.

Seabird Captures in the SQU Fishery

The squid fishery had the lowest total seabird numbers recorded since we went to near 100% observer coverage (7 years-ago) and only once in the last 15 years have we had fewer captures!

A significant component of this was the reduced number of white-chinned petrels caught.

One driver for the reduction in numbers is likely due to changes in fishing distribution in recent years. In 2021-22 approx. 20% of the total squid effort was on the Chatham Rise. This area is significantly further away from the breeding/foraging area of white-chinned petrels and the bird assemblages and behaviour are likely to be different.

The Korean & BATM H&G fleet had very low numbers of bird captures and low capture rates. Comparatively, the domestic fleet had a higher seabird capture rate, which was most evident in the southern squid fishery.

Scampi Fleet

Feedback from observers was largely positive, however, there are still a couple of operators which still need to tighten up on seabird mitigation and fish waste management, particularly for warp captures. There were reduced protected species triggers from the scampi fleet this year and reduced overall seabird capture numbers. However, there was one sea lion capture event that occurred in SCI 6A. Adherence to best practice standards is becoming more aligned across the fleet and there are visible improvements on previous years.

Summary of performance and/or issues during the year

Hoki fleet & warp capture of Salvin's albatrosses.

- For the past seven years, DWG has been working on reducing the risk of warp strikes/captures of the Salvin's albatross, (one of deepwater's highest-risk birds). The capture rate of smaller albatross species (mollymawks) has been relatively high in recent years but in 2019-20 there was a 'spike' in the number of Salvin's caught. It is unknown what the driver of this may have been, as adherence to VMPs and OPs has been very high in recent years.
- Despite the good performance of the fleet, DWG introduced additional measures to reduce the risk to Salvin's and other mollymawk species. A seasonal seabird mitigation plan for the high-risk period (1 Sept to 30 Jan) was written for each vessel in the hoki fillet fleet. The Plan aims to increase awareness of seabird risk using a 'look-think-act' approach and outlines additional mitigation use during the summer months. In particular, the Plan emphasises the need for management procedures around the discharge of SWA fish waste as this is considered a significant attraction for the birds.
- DWG is closely monitoring all Salvin's captures each week over the spring and early summer period. Since implementation, there have been notable reductions in interactions with mollymawk species.

Hoki Cook Strait, Fishery (plus 28m factory & 'Coastal' fresher fleet)

- The Cook Strait and the Pegasus Canyon hoki fisheries had a particularly bad year for multiple capture events of fur seals (21 triggers). Also of concern were 1x common dolphin and 2x dusky dolphins captured in these fisheries.
 - The larger vessels in the CS fleet will carry out net-binding at high risk times next season in order to try and reduce the risk of seal captures
- Reporting from the 'Coastal' fresher fleet needs to improve. While there were a high number of fur seals reported in 2021-22, information suggests that there could still be a level of underreporting. However, adherence to DWG procedures is mostly good, this is assisted by the fact that the same skippers are on the vessels each year (less retraining needed).

SQU and SBW fisheries

- No issues. Overall capture numbers of mammals, sharks & seabirds all down on past years.

Basking sharks

- Three (3) captures this year, well below numbers captured in the previous few years, unusually one in ORH-1 fishery, others were 6 in HOK and 5 in LIN fisheries. Our trigger systems are working well, and we've been managing these captures in real time.

BLL/Ling

- The ling BLL fleet is still a long way from aligning with the standards (across the board). The introduction of the new BLL Circular (2021), has resulted in the whole fleet needing to rethink their approach to setting bottom longlines. The new regulations require vessels to sink their slowest sinking hook to a depth of 5m within the aerial extent of the tori line. Many operators are finding this difficult to meet.
- Additionally, many ling BLL vessels set their lines at less than 3kn, making it very difficult for them to maintain the mandatory 50m aerial extent required for the tori line during high-risk periods.
- A small percent of our BLL fleet set the gear at 2kn to 2.5kn, making it almost impossible to achieve the mandatory 50m aerial extent, the slower you set the harder it is to maintain suitable drag to keep the tori line in the air, but this is offset with much better sink-rates when setting slower
- Likewise setting for Blue Nose, skippers add a lot more flotation to the gear when setting of BNSs, making it impossible to achieve the regulated sink rate requirements! We need to take issue with some parts of the new BLL Regs.
- There are still several bigger Ling- bottom liners tied-up after the demise of the two Ninos, (which had 8 BLL vessels between them, 3 of which were Auto liners) I am monitoring closely if/when their vessels are sold-off and brought back 'into-service' etc.
- There are also more BBL/Ling vessels that have or are switching to potting this year and more are likely to follow.
- There are still some issues with the uptake of our standards in our smaller BLL and to a lesser extent our hoki coastal trawl vessels. Skippers and boat ownership often change, making it difficult to get uptake of information. This year we had many vessels tied up, then sold off, and a few retired from BLL fishing. This also means new owners, and a lot more work to get new operators up to standard.
- Reporting appears to be still not good enough.

Focus This Year 2022/23

- Travelling more to ports and visiting smaller vessel operators I've missed in recent years, (due to COVID etc) bedding in the new BLL regulations across the ling fleet, working with each vessel to help them meet new 5m depth sink depth standards.
- Raising the importance of reducing benthic catch volumes, and staying clear of known high-volume areas. Working with senior crew to establish new ORH/MSC measures, increasing crew ID standards and improving reporting in the new coral trigger and pause tow requirements.
- Visit all scampi trawlers.
- Review the HOK fleet on the Chatham Rise for captures numbers of Salvin's, to check how new Measures and RMPs for the hoki fillet fleet are trending.
- Set up a series of meeting with skippers etc, to work through the hauling procedures for trawlers. Establish when and if they can close off the loose netting/meshes at stern quarter when hauling, to try and reduce risk of net captures.
- Meetings with Hoki Cook Strait operators and work through issues and set up new fur seal mitigation measures for that fishery.
- Work with DWG to ensure any changes to the OPs are fit for purpose and assist with the transition of the OP manual to a digital format on vessels.

Regards John

John Cleal, DWG ELO