2006-19

New Zealand's Deepwater Fisheries

Presentation to Seafood Directions 10 October 2019



Seafood – the Green Protein

"All animal protein production has environmental impacts but seafood has been rated the 'green protein'"

- Professor Ray Hilborn



Impacts are significantly less than on land



Environmental changes are <u>not permanent</u>



Free from:

- Pesticides
- Herbicides
- Hormones
- GMOs





Sustainable Deepwater Fisheries

DWG unites quota owners, leads sustainable management

- Annually harvest 250-300 kt, NZ\$650 m, from <1% of NZ EEZ
- Annually produce 600,000,000 meals
- Underpinned by robust science & co-operative management
- Independently verified by MSC 70% of deep water catch
- Seabird and marine mammal interactions reduced to very low levels – no adverse risks to populations
- MPAs 30% of EEZ closed to trawling sets aside large representative areas of benthic biodiversity – most are pristine



Annual Harvest

—Catch —FOB Value (NZ\$)





Increased Efficiencies

Trawl catch 95% - 99% retained and utilised:



Reduction in the number of trawlers*

52 in 2005-06 31 in 2017-18 28%

Reduction in number of tows*

39,000 in 2005-06 28,000 in 2017-18



Increase in observer coverage*

16% in 2005-06 48% in 2017-18



*Trawlers >28 m LOA

Certified Sustainable

15 deepwater fisheries certified as ecologically sustainable by Marine Stewardship Council
70% of the deepwater catch



Certified Sustainable

Marine Stewardship Council provides an independent audit against international ecological and governance standards

- Third party audit
- Science-based
- Transparent
- Inclusive
- Based on UN guidelines





Ecosystem approach

Embedded in Fisheries Act, guided by Fisheries Plan, audited by MSC

- By-catch and protected species reported + at-sea observers
- Fisheries Plan, Annual Operational Plan, Annual Review Report
- Fisheries Plan integrated with others (NPOA-seabirds, NPOAsharks, TMP-sealions)
- Risk assessments no adverse effects on populations
- >30% of EEZ closed, trawl footprint monitored, hoki nursery and spawning areas managed



Environmental Effects

Since 2006, reduced interactions with protected species:





Captures estimated from observer records - many are released alive



Seabirds

- New Zealand seabird capital of the world, >80 species breeding
- We probably know more, do more, expect more and need to do more than any other nation – that's the deal here
- Significant actions, interventions and processes -13 years for trawl, longer for longline
- Progress made benchmarks well with international results
- We still have challenges with trawl net captures of birds





Seabirds

- We have done a lot and improved a lot
- We have not yet done enough
- We still have issues with trawl net captures of birds
- The base improvements still needed are known and generally tools available
- What is "enough" is constantly changing and is always "more and harder
- For an increasing "some", it will never be enough



Seabirds





Sea Lions





Sea Lions





Common dolphins





Common dolphins





Environmental Effects

Protected Areas

1% of the EEZ is trawled annually

8% of the EEZ has ever been trawled

30% of the EEZ is closed to trawling



Science-based Management

Best international scientists engaged Australia, New Zealand, South Africa, Canada, USA, United Kingdom

- Stock assessments
- Biomass surveys
- Ageing studies
- New technologies
- Environmental studies





Summary

New Zealand's deepwater fisheries

- Produce sustainable seafood 600,000,000 meals every year
- Ecologically sustainable, science-based management, closely monitored, independently audited
- Main fisheries independently assessed as being amongst top 4% of the best managed fisheries in the world
- We've done a lot and improved a lot BUT still work in progress
- Collaboration between quota owners, MPI, DOC and science service providers (CSIRO in particular) has proven essential

