Management of South Island Hector's dolphins

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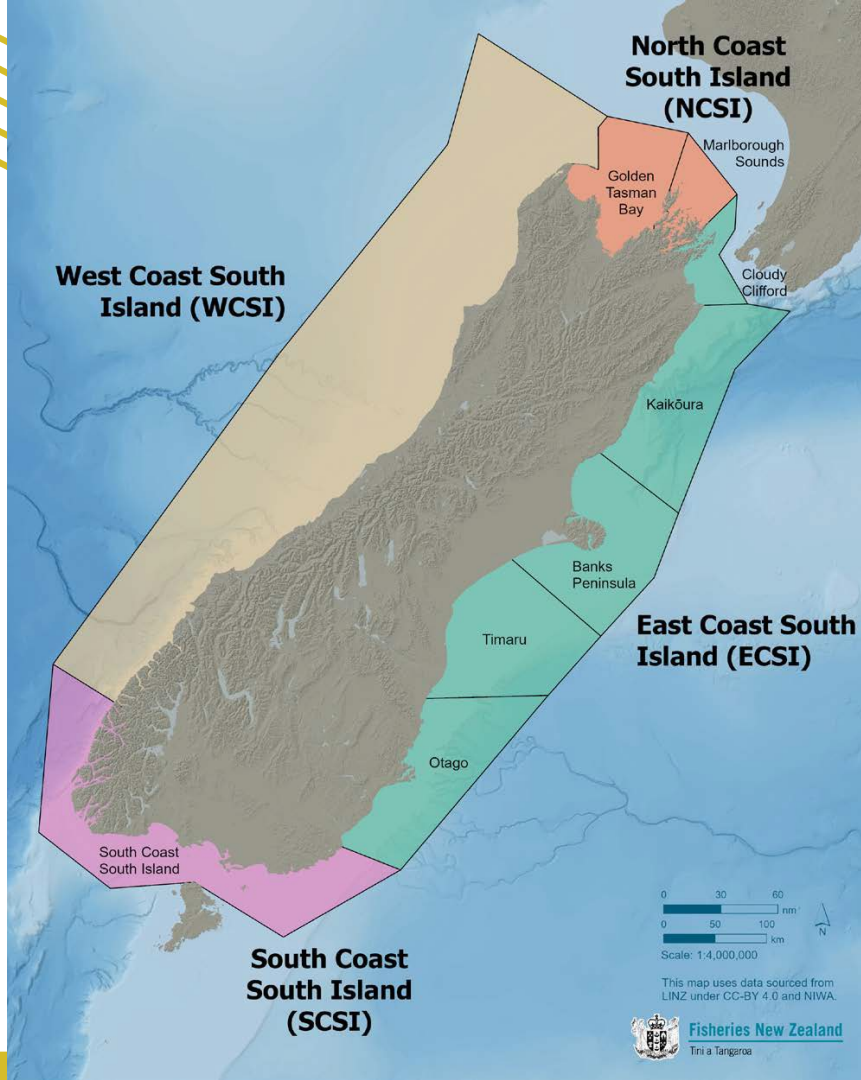
Hector's dolphin populations – recap

- Endemic, protected species and taonga for tangata whenua
- *Nationally Vulnerable*
- South Island's Hector's dolphin population ~15,700
- East coast subpopulation comprises five local populations
- 19 October 2023: Firth of Thames – two dolphins sighted



Timeline

2020

- Review of the *Hector's and Maui Dolphin Threat Management Plan* (TMP)
- Variations to marine mammal sanctuaries introduced
- Extensive commercial and recreational set-net prohibitions put in place
- Drift-netting prohibited

2021

- October: further consultation on fisheries measures to protect South Island Hector's dolphins

2022

- *South Island Hector's Dolphin Bycatch Reduction Plan* released – Nov 2022
- Banks Peninsula closed area extended

31 Oct 2023

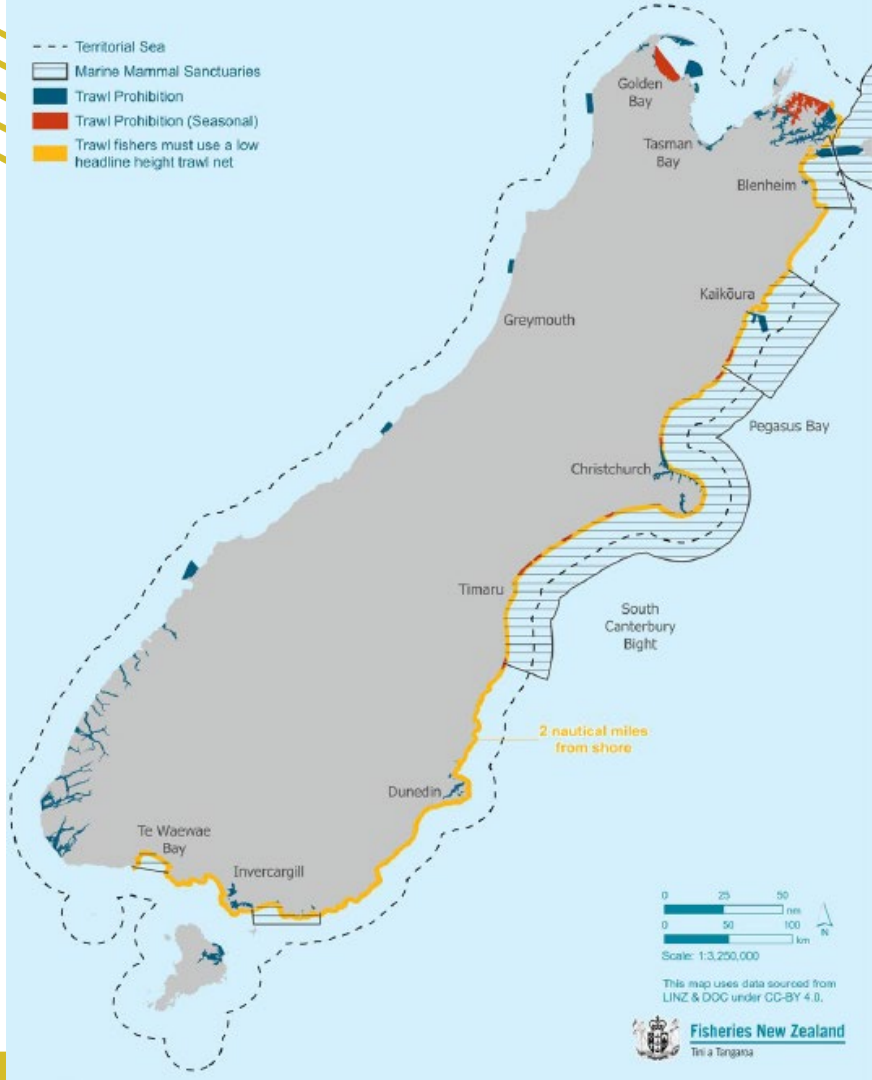
- Onboard cameras go live
- Platform for near 'real-time' management

Spatial management – set-net

- Responsible for majority of commercial fishing-related deaths
- Commercial and recreational set-net prohibitions around entire South Island
- **Approx. 17,650 sq. km** closed to set-netting

Spatial management – trawl

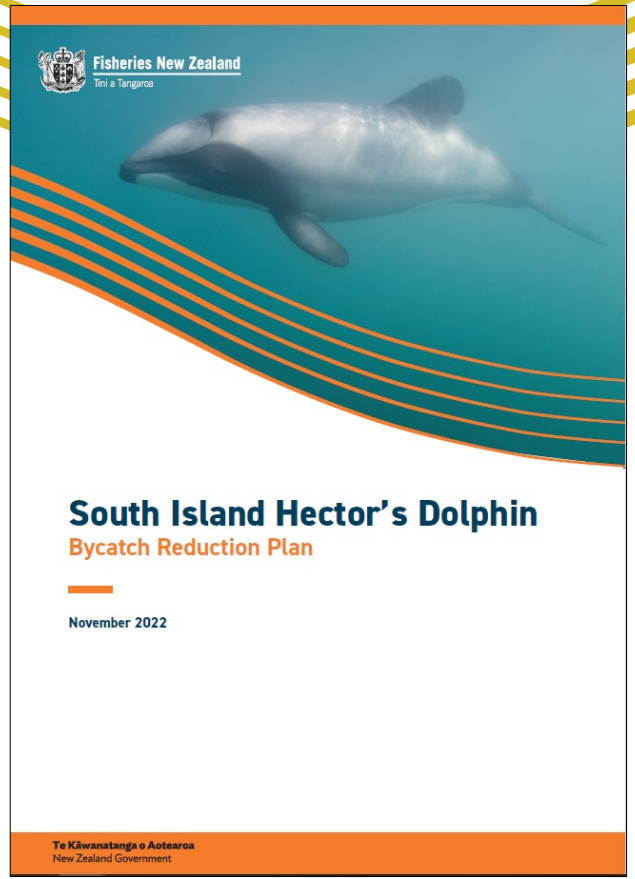
- Lower risk profile
- Seasonal and year-round trawl prohibitions
- Areas shown in yellow:
  trawl net headline height must not exceed 1m
- **Approx. 8,300 sq. km** of trawl measures (including closures and gear restrictions) in place.



South Island Hector's Dolphin Bycatch Reduction Plan (BRP)

FNZ is committed to further supporting Hector's dolphins in the South Island to thrive and recover throughout their natural range

- **All sectors** – customary, recreational and commercial
- The intent of the BRP is to achieve the fisheries objectives outlined in the TMP and **reduce bycatch towards zero**
- **Supporting fishing communities** to continue fishing

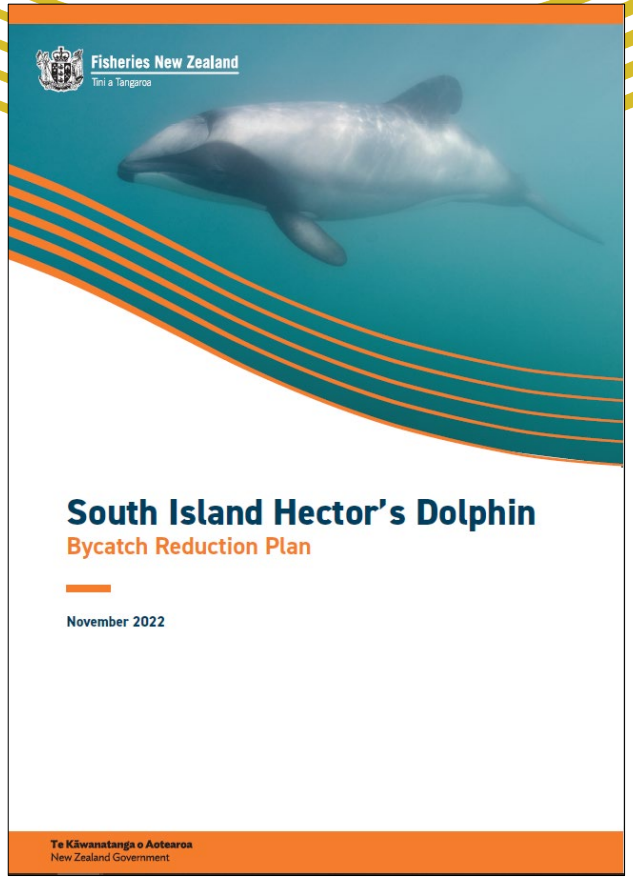


South Island Hector's Dolphin Bycatch Reduction Plan

- Suite of **voluntary and regulatory** measures

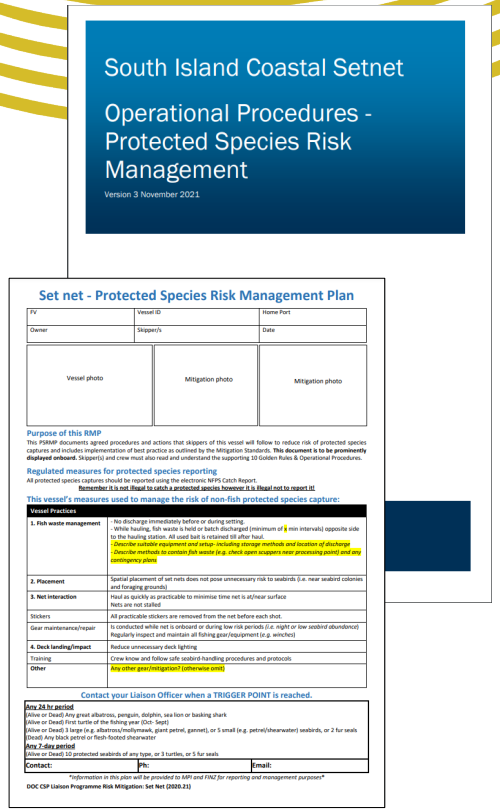
Voluntary measures	Regulatory measures
Protected Species Risk Management Plans	Fishing-related mortality limits (**FRMLs**)
Vessel-based escalating responses	Electronic Catch and Geospatial Position Reporting (ER/GPR)
Area-based escalating responses	Electronic Monitoring (onboard cameras)

- **Public** reporting
- Annual review and **reporting on performance to ministers**



Protected Species Risk Management Plans (PSRMPs)

- **Regulatory and voluntary measures** a vessel operator will undertake to avoid interactions
- Managed by **DOC**
- Sets out a vessel's **mitigation measures**
- Further **escalating** vessel- and area-based responses may be required



South Island Coastal Setnet

Operational Procedures - Protected Species Risk Management

Version 3 November 2021

Set net - Protected Species Risk Management Plan

FV	Vessel ID	Home Port
Owner	Skipper/s	Date

Vessel photo	Mitigation photo	Mitigation photo

Purpose of this RMP

This PSRMP documents agreed procedures and actions that skippers of this vessel will follow to reduce risk of protected species captures and includes implementation of best practice as outlined by the Mitigation Standards. **This document is to be *prominently* displayed onboard.** Skipper(s) and crew must also read and understand the supporting 10 Golden Rules & Operational Procedures.

Regulated measures for protected species reporting

All protected species captures should be reported using the electronic NPS Catch Report.

Remember it is not illegal to catch a protected species however it is illegal not to report it!

This vessel's measures used to manage the risk of non-fish protected species capture:

Vessel Practices	
1. Fish waste management	- No discharge immediately before or during setting - While hauling, fish waste is held or batch discharged (minimum of ¼ min intervals) opposite side to the hauling station. All used bait is retained till after haul. *- Describe suitable equipment and setup- including storage methods and location of discharge* *- Describe methods to contain fish waste (e.g. check open scuppers near processing point) and any contingency plans*
2. Placement	Spatial placement of set nets does not pose unnecessary risk to seabirds (i.e. near seabird colonies and foraging grounds)
3. Net interaction	Haul as quickly as practicable to minimise time net is at/near surface Nets are not stalled
Stickers	All practicable stickers are removed from the net before each shot.
Gear maintenance/repair	Is conducted while net is onboard or during low risk periods *(i.e. night or low seabird abundance)* Regularly inspect and maintain all fishing gear/equipment (e.g. winches)
4. Deck landing/impact	Reduce unnecessary deck lighting
Training	Crew know and follow safe seabird-handling procedures and protocols
Other	Any other gear/mitigation? (otherwise omit)

Contact your Liaison Officer when a TRIGGER POINT is reached.

Any 24 hr period
(Alive or Dead) Any great albatross, penguin, dolphin, sea lion or basking shark
(Alive or Dead) First turtle of the fishing year (Oct- Sept)
(Alive or Dead) 3 large (e.g. albatross/mollymawk, giant petrel, gannet), or 5 small (e.g. petrel/shearwater) seabirds, or 2 fur seals
(Dead) Any black petrel or flesh-footed shearwater
Any 7-day period
(Alive or Dead) 10 protected seabirds of any type, or 3 turtles, or 5 fur seals

Contact:	**Ph:**	**Email:**

Information in this plan will be provided to MPI and FINZ for reporting and management purposes

DOC CSP Liaison Programme Risk Mitigation: Set Net (2020-21)

Vessel-based response

- **Type of response and level of support will escalate** if a single vessel is responsible for more than one capture in a rolling 12-month period
- **Draws together** FNZ, the DOC Liaison Programme and industry
- Investigate the reasons for **each capture**
- Identify and implement vessel-specific methods and approaches to **reduce the likelihood of further captures by that vessel**

Figure 2. Summary of the standard and escalating responses (in a rolling 12-month period) that would apply to a vessel operator in the event of a Hector's dolphin capture.

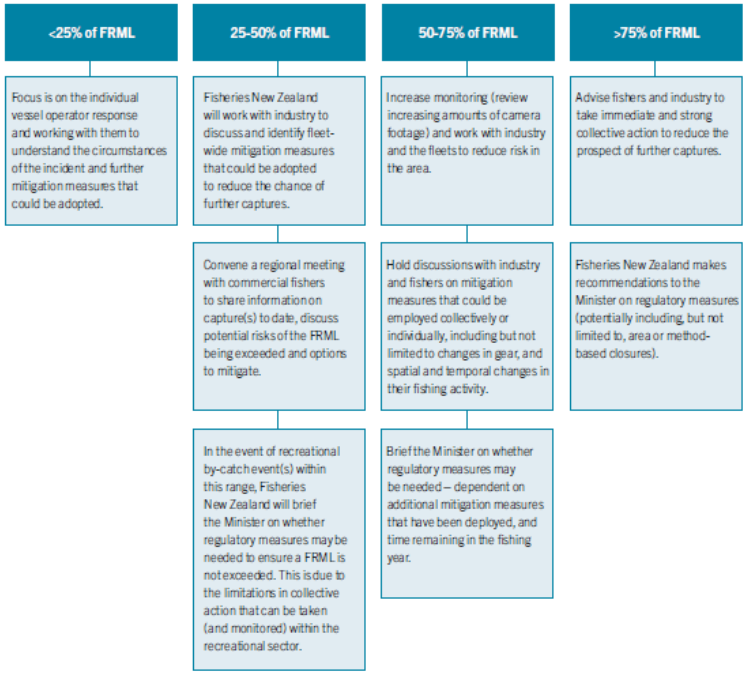
Vessel based escalating response

Tools	Each capture event	2nd capture event	3rd+ capture event
Individual Protected Species Risk Management Plan (PSRMPs) implemented on all set net and trawl vessels. PSRMPs should be reviewed by a DOC Liaison Officer. On-board camera monitoring on most inshore set net and trawl vessels. Footage from each capture event will be reviewed by Fisheries New Zealand. Vessel operators are able to retain Hector's dolphin carcasses (via prior authorisations) without an observer on board, to enable necropsy.	Live captures are released ASAP. Dead dolphins are retained to enable necropsy. Vessel operator immediately notifies the DOC Liaison Officer (and their industry representative if applicable) to report the incident. DOC Liaison Officer and vessel operator discuss incident to identify possible reasons the interaction occurred. Individual vessel PSRMPs will be amended as appropriate. If applicable, industry representatives provide support to the vessel operator and identify any further mitigation options for inclusion in their risk management plans. Fisheries New Zealand receives automated daily notifications of bycatch reports.	Where authorised, industry liaises with the vessel operator and the wider fleet on details of the incident. Fisheries New Zealand and DOC Liaison Officer work to identify any commonalities in bycatch events. Individual vessel risk management plans may be amended. Monitoring focus: • Fisheries New Zealand may increase audit-review of on-board camera footage; and/or • deploy an independent observer onboard the vessel to ensure operators are using best practice.	Immediate voluntary action to reduce the risk of another capture through increased mitigation e.g. changes to gear, areas of operation and/or time of fishing. Monitoring focus: • Fisheries New Zealand may increase audit-review of on-board camera footage; and/or • deploy an independent observer onboard the vessel to ensure operators are using best practice.

Area-based response

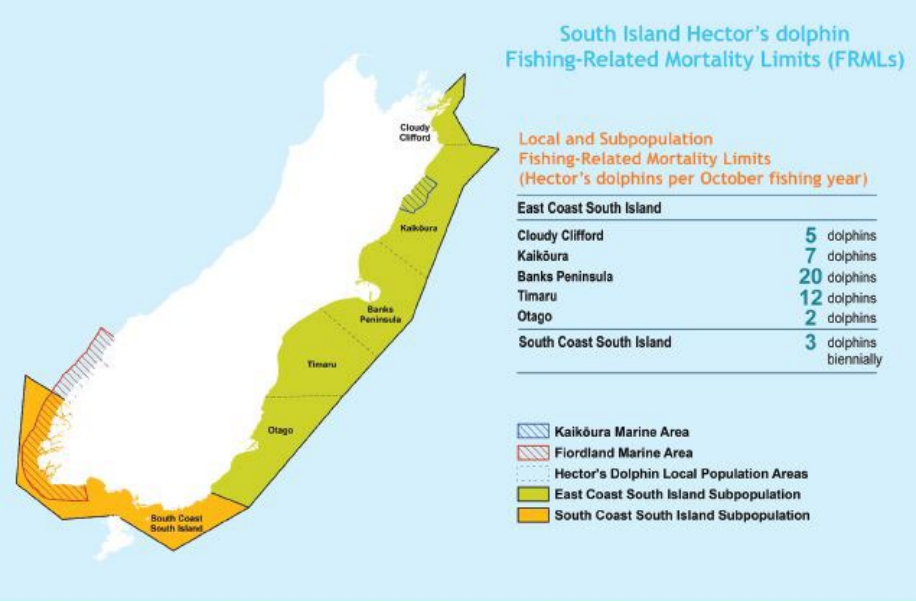
- **Second layer of protection**
- Addresses risk at a **regional level**
- **Escalating** response
- Commercial fishers in an area **collectively undertake voluntary measures** to avoid further captures
- Minister has ability to **act quickly and prohibit all or any fishing or fishing methods** in an area where a FRML has been set, to ensure the FRML is not reached.

Figure 3. Area based response escalation based on a defined number of reported and/or observed Hector's dolphin captures within a sub or local population.



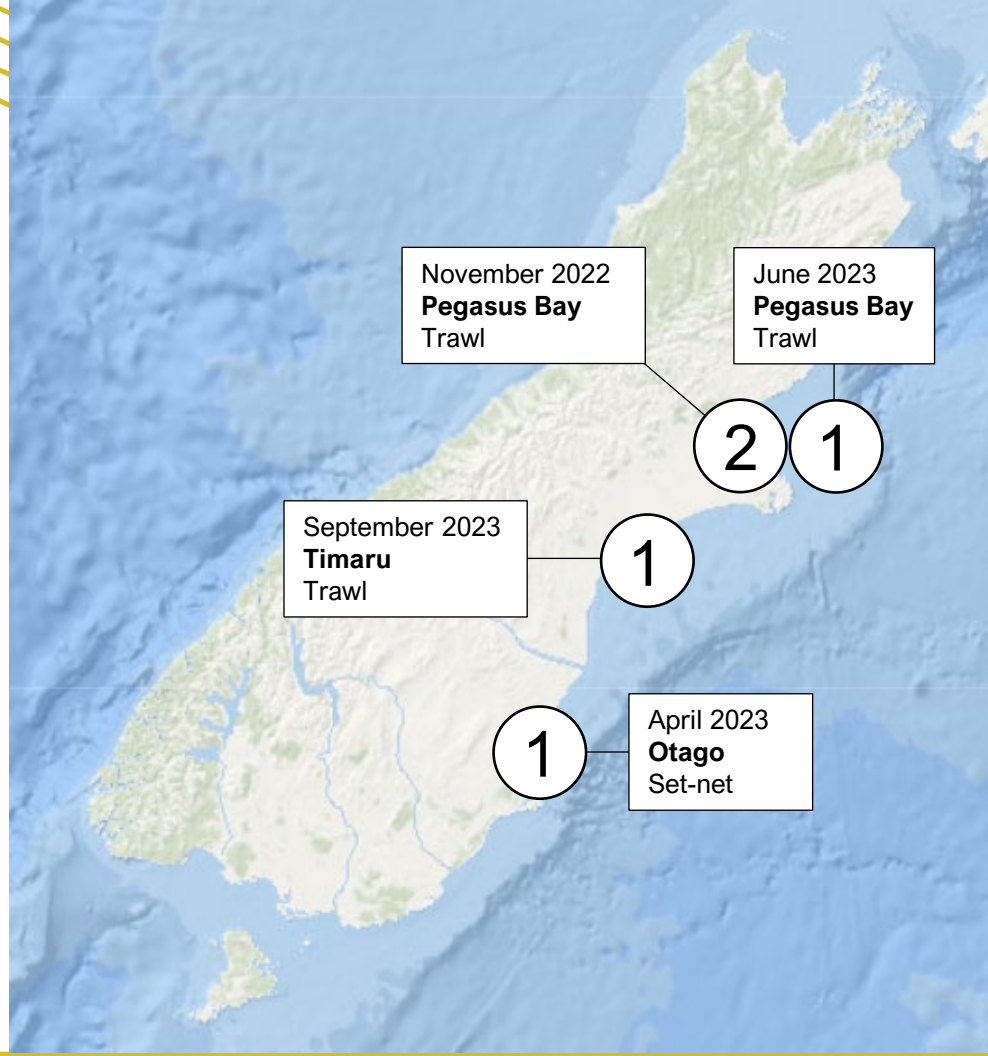
Hector's dolphin FRMLs: overview

- **Back-stop** – not a target and not intended to be reached
- Framework for an **escalating response** to capture
- Gives the Minister the power to take immediate action to ensure FRMLs **are not exceeded**



Reported captures: 2022/23 fishing year

- Four bycatch incidents reported
- Five deaths
- Fisheries Observers present on vessel for two capture incidents
- Onboard cameras live since 31 October 2023 – time-lag in footage review
- No captures reported to-date in 2023/24

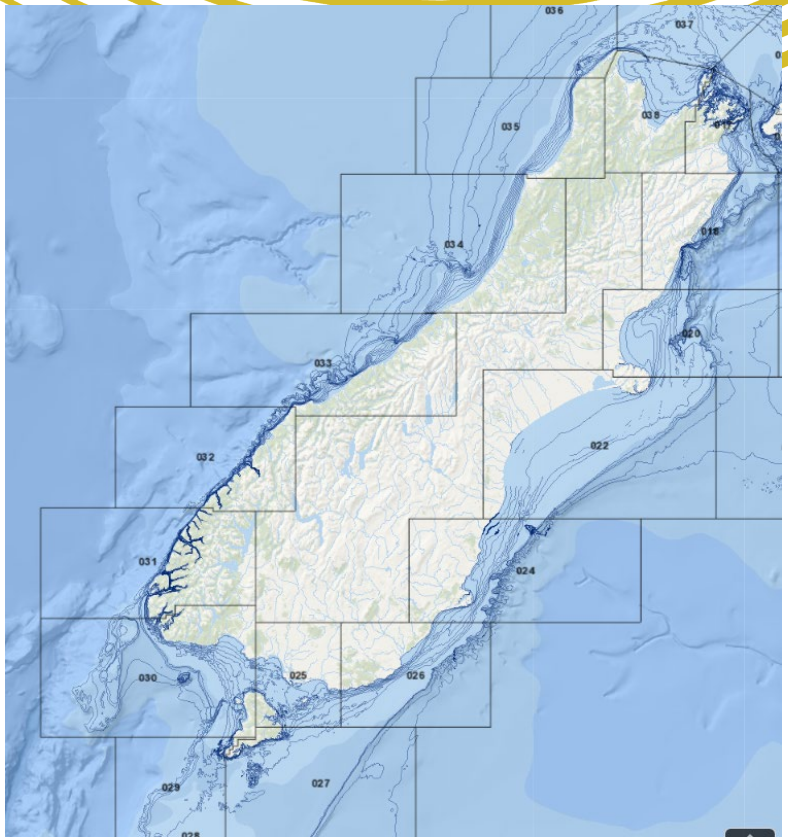


Observer coverage*: South Island inshore waters

- 2022/23 October fishing year
- Percentage of fishing effort monitored (observed)

  Trawl – 14.6%
  Set net – 15.0%

- Correct as of 06 November 2023
- Moving into 2023/24 – monitoring will be via onboard camera



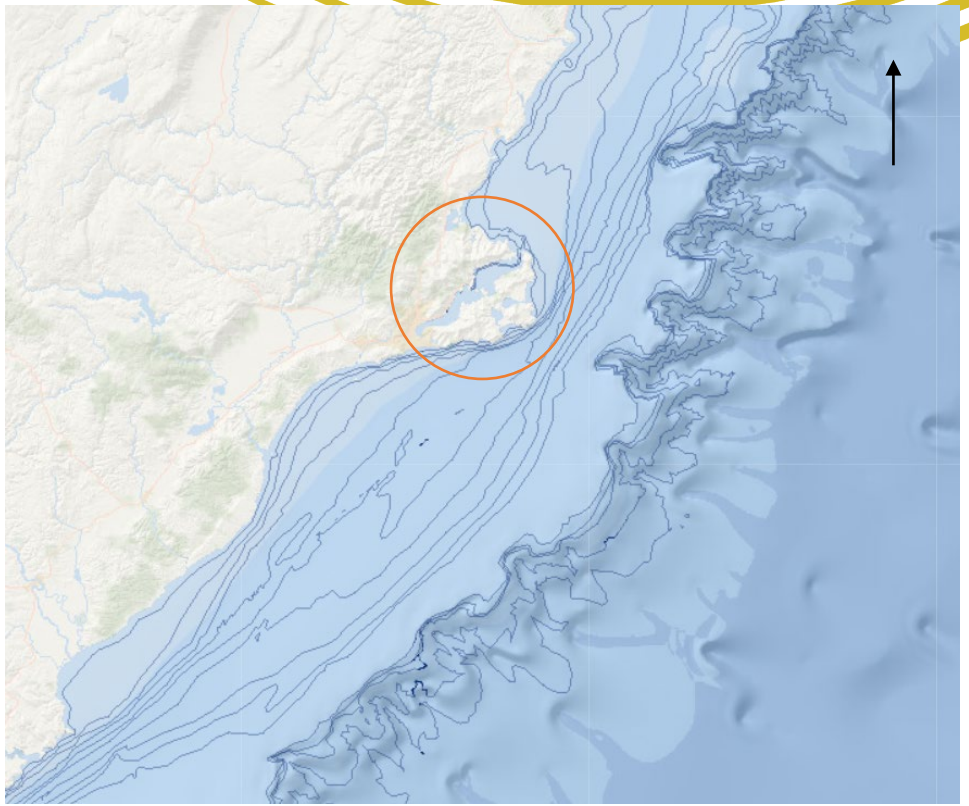
***Effort measure used: number of events**

2022/23

What does a response under the Bycatch Reduction Plan look like in practice?

Otago Hector's dolphin capture: April 2023

- Set-net vessel
- Observer present + fisher-reported
- Triggered escalating vessel- and area-based response
- Guided by the BRP and the FRML for the Otago area (50-75%)



Otago capture: timeline

Day of capture	Capture reported by operator Observer trigger report generated Dolphin collected for necropsy Protected Species Liaison Officer spoke to operator
+2 weeks	FNZ met with Otago fishers and industry representatives
+3 weeks	Voluntary closure of capture area implemented FNZ monitoring set-net vessel position
+4 weeks	Briefing to Minister for Oceans and Fisheries – incl. voluntary and regulatory options Minister approves voluntary measures as appropriate response
+6 weeks	Observer placement notices on all Otago set-net vessels extended
+8 weeks	Incident and FNZ response included in public quarterly reporting
30 September	2022/23 fishing year ends

Conclusions

- Transition year – step-change in the management of Hector's dolphins
- *Bycatch Reduction Plan* in place for one year
- Every capture matters
- Entering a new space re. electronic monitoring
- Transparency
- Adaptive and progressive
- Information sharing

Questions?

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Onboard camera roll-out

Set-net vessels ≥8m and trawl vessels ≤32m operating in inshore waters on the south, east and north coasts of the South Island

fishing methods which pose greatest risk to protected species i.e., Hector’s dolphin.

65 trawl and set-net vessels

Go-live 31 October 2023

<< 20 day overlap with observers – more info needed >>