

Hector's and Māui Dolphin Threat Management Plan Review

VISION: *New Zealand's Hector's and Māui Dolphin subpopulations are resilient and thriving throughout their natural range*

Background

The Threat Management Plan was first implemented in 2007. The Māui section of the plan was reviewed in 2012. In total current fishing restrictions include:

- For Māui dolphins - 7,000 km² closed to set netting and 4,300 km² closed to trawling.
- For Hector's dolphins - 13,000 km² closed to set netting and 3,000km closed to trawling.

Since 2012 a significant research programme has been undertaken, culminating in a full scientific risk assessment of human impacts on the dolphins. The scientific programme has been independently peer reviewed, including by an international panel. The current Threat Management Plan review is also supported by a North and South Island stakeholder working group and iwi engagement processes. The scientific work has been undertaken to address concerns about the evidence base to support decision making and to mitigate the risk of industry successfully judiciously reviewing decisions, as occurred in 2008.

Population status and trends

Māui Dolphins: Nationally Critical

- Approximately 63 individuals aged one year and older, all on the West Coast of the North Island.
- Population has declined. The rate of decline may have slowed in last decade but population remains vulnerable to any human-induced mortality.

Hector's Dolphins: Nationally Vulnerable

- Approximately 15,000 total with different sized sub-populations on the east, west and south coasts of the South Island.
- Population trends uncertain but subpopulations may be declining.

Hector's and Māui dolphin threats – deaths per year from various causes

| Sub species | Cause of death | | | | |
|-------------|----------------|---------------|---------------|---------------|-------------------------------------|
| | Set Net | Inshore Trawl | Toxoplasmosis | Predation | Other (including natural mortality) |
| Māui | 0.00–0.30 | 0.00-0.05 | 0.45–3.27 | 0.12–5.25 | 0.67–8.66 |
| Hector's | 19.5-91.91 | 0.20–27.85 | 53.10–738.53 | 16.03–1187.12 | 126.06–1403.36 |

NB Non-fishing related deaths have been estimated by a different method and caution should be exercised in comparing estimates from the two methods.

Threat Management Plan Options

Fishing-related Threats:

| Sub-species | Option | Fishing Impact on dolphin population recovery | Impact on fishing |
|-------------------------|--|---|---|
| Māui (North Island) | 1: Current set net and trawl restrictions (covering 7000 km ²), enhanced monitoring, including within harbours. | | High priority set net and trawl vessels required to use on-board cameras from 1 November 2019 (Stage One); <i>Unconfirmed</i> |
| | 2: Option 1 <i>plus</i> a further 6700 km ² extension of set net restrictions and 1400 km ² of trawl restrictions. | No more than 5% impact on population recovery, with 90% certainty | 95% and 30% increase in area where set nets and trawling respectively are restricted. Affects 10% of catch of 78 set net fishers and 70% of catch of 28 set net fishers. Affects 10% of catch 8 trawlers and 50% of catch of 2 trawlers. Up to \$3.6 million in lost annual revenue and \$10.3 million in total lost economic value in 1 st year. Plus additional impacts on processing. Impacts on recreational fishing. |
| | 3: Options 1 and 2 <i>plus</i> a further 2700 km ² of set net restrictions (including harbours) and 6700km ² of restrictions on trawling. | No more than 5% impact on population recovery with 95% certainty | 140% and 190% increase in area where set nets and trawling respectively are restricted. Affects 10% of catch of 112 set net fishers and 70% of catch of 30 set net fishers. 95% of set net fishers are small and will struggle to adapt) Affects 10% of catch of 15 trawlers and 70% of catch of 3 trawlers. Up to \$10.5 million in lost revenue and \$31.8 million in total lost economic value in 1 st year. Impacts on recreational fishing. |
| | 4: Ban set netting and trawling to 100 m depth contour and close harbours | No more than 5% impact on population recovery with greater than 95% certainty | Affects 10% of catch of 160 set net fishers and 70% of catch of 96 set net fishers. Affects 10% of catch of 18 trawlers and 70% of catch of 6 trawlers. Up to \$18.1 million in lost revenue and \$51 million in total lost economic value in 1 st year. |
| Hector's (South Island) | 1: Current set net and trawl restrictions (covering 10,400km ² and 2500km ² seasonally) with enhanced monitoring <i>Unconfirmed</i> including within harbours. | | <i>Unconfirmed</i> |
| | 2: Option 1 <i>plus</i> a further 6000 km ² of set net and 3600 km ² of trawl restrictions in key areas of dolphin subpopulation habitat. | No more than 10% impact on population recovery with 90% certainty | Affects 10% of catch of 28 set net fishers and 70% of catch of 5 set net fishers. Affects 10% of catch of 45 trawlers and 70% of catch of 9 trawlers. Up to \$8.5 million in lost revenue and \$23.8 million in total lost economic value in 1 st year. |
| | 3:Options 1 and 2 <i>plus</i> : Further 500 km ² in set net and 2700 km ² in trawl restrictions in key areas of dolphin subpopulation habitat. | No more than 5% impact on population recovery with 90% certainty | Affects 10% of catch of 29 set net fishers and 70% of catch of 7 set net fishers. Affects 10% of catch of 77 trawlers and 70% of catch of 13trawlers. Up to \$12.2 million in lost revenue and \$34. million in total lost economic value in 1 st year. |

Non-fishing Threats:

Toxoplasmosis: Proposed action plan

- targeted research programme to identify and answer priority knowledge gaps;
- advocating responsible cat ownership, particularly in risk catchments;
- developing educational material aimed at behaviour change in humans with respect to cats;
- advocating for riparian and wetland restoration in risk catchments, and
- working with biosecurity managers on prioritising feral cat control

Marine Mammal Sanctuaries: Proposed extension options

Options to extend and strengthen the West Coast North Island and Banks Peninsula marine mammal sanctuaries to reflect the updated dolphin distribution information from the risk assessment and provide, for example, for more precautionary management of:

Seismic Exploration – options exclude existing permit holders

- 3 proposed options: compliance with DOC seismic surveying code, a permitting regime, and prohibition of seismic exploration within the sanctuary

Seabed Mining – options exclude existing permit holders

- 4 options: status quo, prohibition on mining within existing West Coast North Island sanctuary out to 8 or 12 nautical miles, prohibition on mining out to 2 nautical miles within the proposed sanctuary extension to Wellington, and prohibition on mining within 2 nautical miles of the coast within the four South Island marine mammal sanctuaries (including the proposed extensions in previous options.

Other Threats

- Proposed moratorium on new permits for viewing Māui dolphins.

| Threat Management Plan Timetable | |
|---|---|
| Consultation proposal and draft discussion document for Cabinet | Submitted in early June, Cab decision in mid June |
| Public consultation | Mid-June to early August (6 weeks) |
| Joint Ministers briefed on outcome of consultation | Mid-September 2019 |
| Final advice to Cabinet | Late October 2019 |
| Announcement followed by prioritised implementation | November 2019 |

Other relevant workstreams

Confidentiality

Proposal for On-Board Cameras

- Government has announced a requirement for the use of on-board cameras for commercial fishing vessels using high-risk fishing methods in areas that potentially overlap with Māui dolphins (Stage One). Comes into effect from 1 November 2019.

Unconfirmed