

**NOAA**  
**FISHERIES**

Pacific Islands Regional Office  
Protected Resources Division

# False Killer Whale Take Reduction Plan

Marine Mammal Commission Meeting



Kona, HI  
May 21, 2019

# False Killer Whale Take Reduction Plan

False Killer Whale Take Reduction Plan (77 FR 71260; November 29, 2012)

Purpose: Reduce mortality and serious injury of the Hawaii Pelagic and Hawaii Insular stocks of false killer whales in the Hawaii longline fisheries.

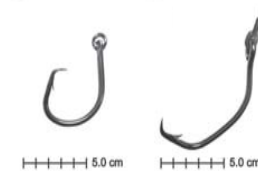
## Goals:

1. Short-term goal is to reduce, within six months of the Plan's implementation, incidental M&SI of the Hawaii Pelagic and Insular stocks to less than the stocks' PBR.
2. Long-term goal is to reduce, within five years of the Plan's implementation, incidental M&SI of the Hawaii Pelagic and Insular stocks to insignificant levels approaching zero (i.e. less than 10 percent of PBR).
3. Incidental M&SI of the high seas component of the Hawaii Pelagic stock does not increase (M&SI at time of final rule: 11.2 false killer per year).

# False Killer Whale Take Reduction Plan

## Summary of Regulatory Measures

- Two gear requirements for deep-set longline fishery
  - “Weak” circle hooks
  - “Strong” branch lines



Shape	Circle
Wire diameter	$\leq 4.5$ mm
Cross-section	Sufficient round wire to be measured
Offset	$\leq 10^\circ$



Monofilament line must be  $\geq 2.0$ mm diameter

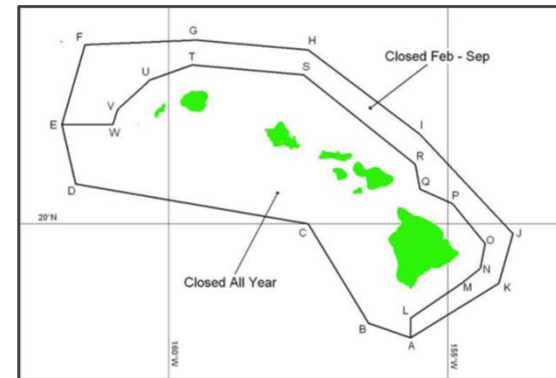
Any other material must have a breaking strength  $\geq 400$  lbs

# False Killer Whale Take Reduction Plan

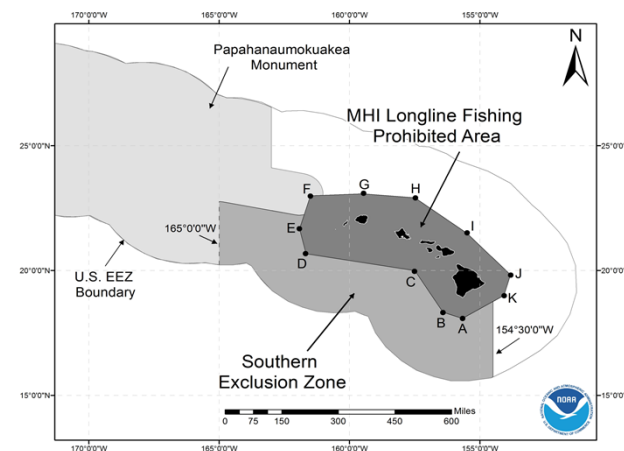
## Summary of Regulatory Measures

- Two gear requirements for deep-set longline fishery
  - “Weak” circle hooks (i.e.  $\leq 4.5$  mm dia.)
  - “Strong” branch lines (i.e.  $\geq 2.0$  mm dia.)
- Two longline closure areas
  - MHI Longline Fishing Prohibited Area
    - Prior to the TRP there was the northern section was open seasonally, following the TRP the area became a year round closure.
  - Southern Exclusion Zone
    - Closed to deep-set longline fishing if within a single calendar year the observed M&SI, when expanded for observer coverage, exceed the pelagic stock’s PBR.

MHI Longline Fishing Prohibited Area



Southern Exclusion Zone

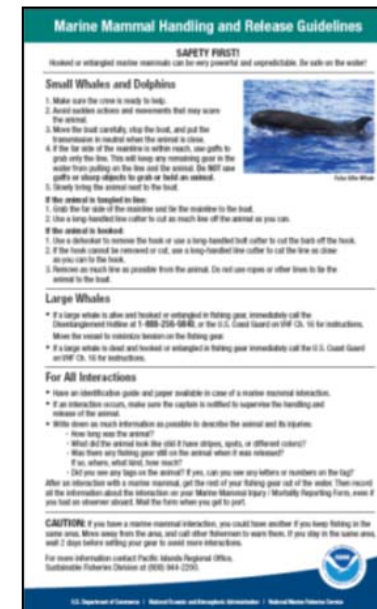


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  - MHI Longline Fishing Prohibited Area
  - Southern Exclusion Zone
- Four measures to improve captain and crew response to hooked or entangled marine mammals

1. Train captains in marine mammal handling and release, Protected Species Workshop
2. Captain must supervise marine mammal interactions
3. Posting of placard with handling/release guidelines
4. Posting of placard instructing crew to notify captain



# False Killer Whale - Interactions

## 2019 Observed Interactions (January 1 – April 17)

- 4 FKW and 1 blackfish interaction, all in the deep-set fishery
  - 2 FKW and 1 blackfish outside the EEZ
  - 2 inside the EEZ, one mortality and one serious injury
    - These two M&SI inside the EEZ met the trigger for a Southern Exclusion Zone (SEZ) closure
- SEZ closed on February 22, 2019

## 2018 Observed Interactions

- 13 false killer whale interactions and 1 black fish interaction, all in the deep-set fishery
  - 9 FKW and 1 blackfish outside the EEZ (final injury determinations pending)
  - 4 FKW inside the EEZ (all resulted in serious injuries)
    - Triggered SEZ closure
- SEZ closed - July 24 – December 31, 2018
  - SEZ closed through the remainder of the calendar year because the SEZ was not closed in the previous year.

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# Southern Exclusion Zone Closure - 2019

## 2019 Southern Exclusion Zone Closure

- On February 22, 2019, NMFS closed the Southern Exclusion Zone (SEZ) to deep-set fishing (84 FR 5356).
- An observed interaction on January 10 resulted in a mortality. Following the procedures for distinguishing serious from non-serious injuries (NMFS Policy Directive PD 02-238 and Instruction 02-238-01), NMFS determined that a second interaction on Jan 15 was a serious injury.
  - These two M&SI in a single calendar year met the SEZ Closure trigger
- This is the second consecutive year that the SEZ has been closed; the SEZ will remain closed until opened by NMFS per the criteria specified in the Plan regulations.
  - Per the Plan regulations, the SEZ will remain closed until at least the end of the current calendar year.



# Southern Exclusion Zone Closure - 2019

## Southern Exclusion Zone Closure Reopening Criteria

### False Killer Whale Take Reduction Plan Regulations (229.37(e)(7))

If the SEZ was closed in the previous year, NMFS would reopen the SEZ if one or more of the follow criteria were met:

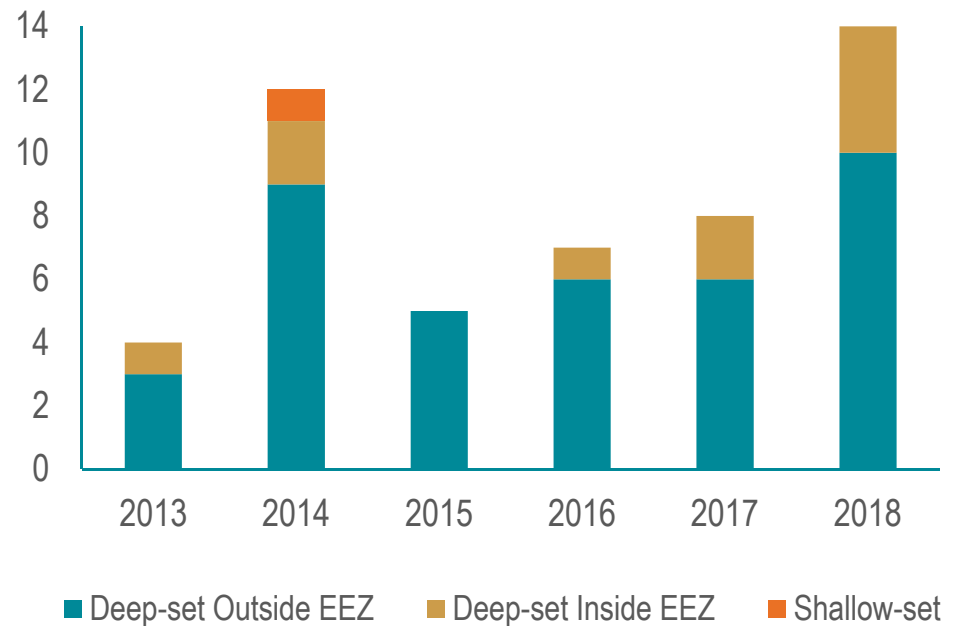
- I. NMFS determines, upon consideration of the FKWTRT's recommendations and evaluation of all relevant circumstances, that reopening of the SEZ is warranted;
- II. In the 2-year period immediately following the SEZ closure, the deep-set fishery has zero observed false killer whale M&SI within the remaining open areas of the EEZ around Hawaii;
- III. In the 2-year period immediately following the closure, the deep-set fishery has reduced its total rate of false killer whale M&SI (including the EEZ around Hawaii, the high seas, and the EEZ around Johnston Atoll (but not Palmyra Atoll)) by an amount equal to or greater than the rate that would be required to reduce false killer whale incidental mortality and serious injury within the EEZ around Hawaii to below the Hawaii Pelagic false killer whale stock's PBR; or
- IV. The average estimated level of false killer whale M&SI in the deep-set longline fishery within the remaining open areas of the EEZ around Hawaii for up to the 5 most recent years is below PBR for the Hawaii Pelagic stock of false killer whales at that time.

# False Killer Whale Take Reduction Plan

## 2013-2018 Interactions

Year	Deep-set		Shallow-set	Total
	Outside EEZ	Inside EEZ		
2013	3	1	0	4
2014	9	2	1	12
2015	5	0	0	5
2016	6	1	0	7
2017	6	2	0	8
2018	10*	4	0	14
Total	39	10	1	50
%	84%	13%	3%	

\* Includes one blackfish interaction

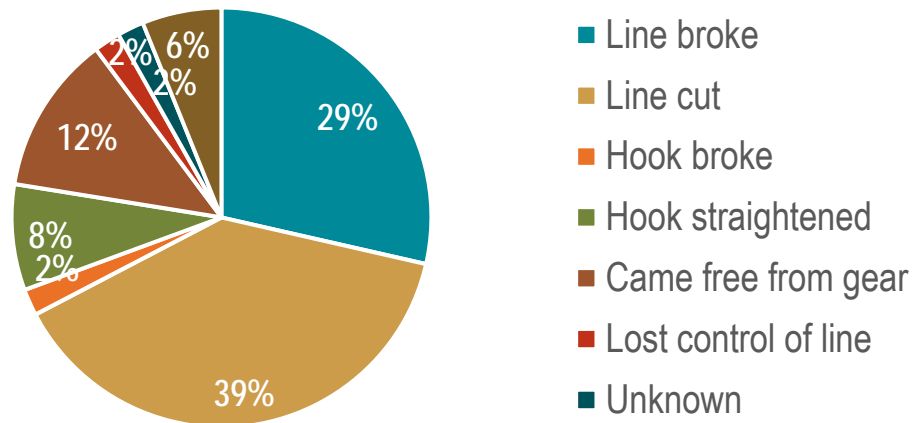


# False Killer Whale Take Reduction Plan

Outcome	2013	2014	2015	2016	2017	2018	Total
Line cut	0	5	2	2	2	8	19
Line broke	2	4	1	2	2	3**	14
Hook broke	0	1	0	0	0	0	1
Hook straightened	1	1	1	0	1	0	4
Came free from gear**	1	0	0	1	1	3	6
Lost control of line	0	0	0	1	0	0	1
Unknown	0	0	0	1	0	0	1
Mortality	0	0	1	0	2	0	3

\* Animal came free from gear with no signs of hook straightening or bending

\*\* Includes one blackfish

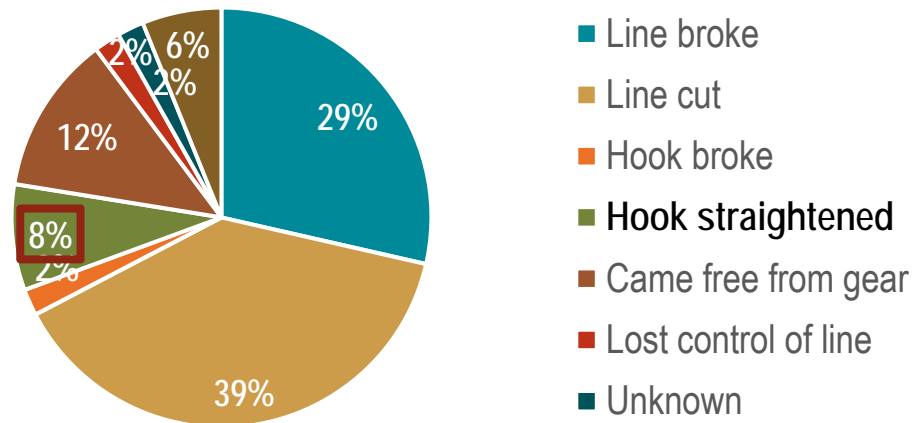


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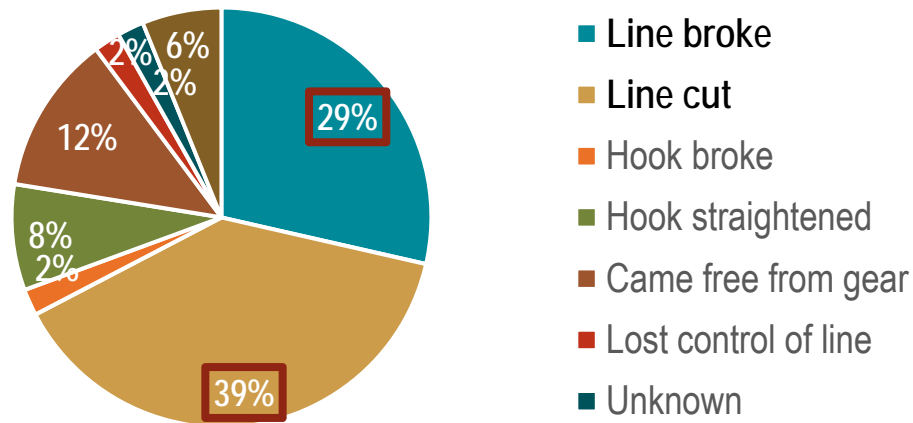


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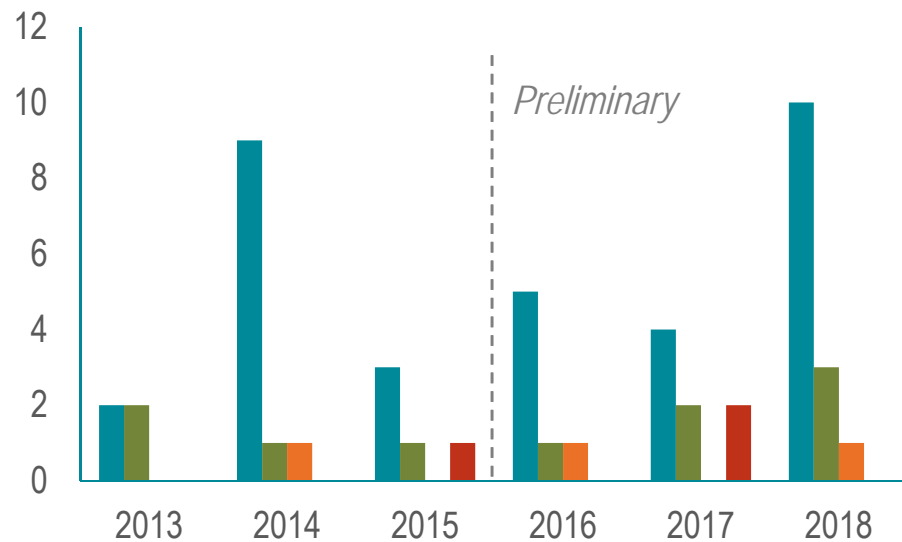
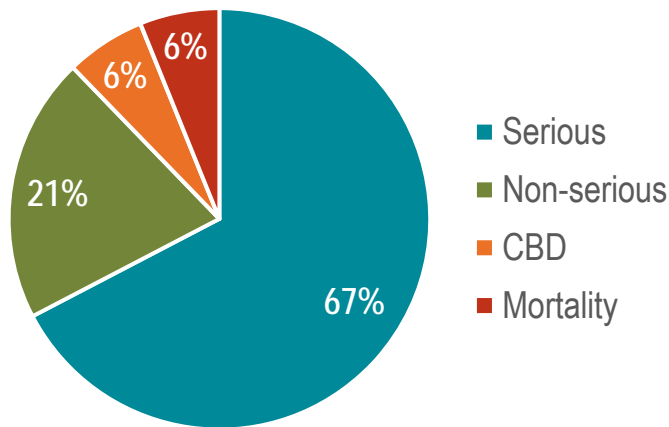
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Injury Determination	2013	2014	2015	2016	2017	2018	Total
Serious	2	9	3	5	4	10*	33
Non-serious	2	1	1	1	2	3	10
CBD	0	1	0	1	0	1	3
Mortality	0	0	1	0	2	0	3

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# False Killer Whale Take Reduction Plan

## Interactions (2013-2018):

- 49 in the deep-set, 1 in the shallow-set
- Deep-set
  - 2013-2018: 39 outside EEZ, 10 inside EEZ
  - 2018: 10 outside EEZ, 4 inside EEZ
- *2019 (1/1-3/18): 5 interactions (including one blackfish)*
  - *2 inside EEZ, both M&SI*

## Outcome (2013-2018):

- Line cut during 39% of interactions, line broke during 29%
- 73% M&SI, 21% NSI, 6% CBD

## Southern Exclusion Zone:

- Closed in 2018 - July 24 through December 31
- Closed in 2019 – Effective February 22, reopened per Plan regulations

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# False Killer Whale Take Reduction Team

## FKWTRT in-person meeting in April 2018:

- Team evaluated the status of the Plan and the status of FKW interactions following Plan implementation.
- Determined that the Plan is not meeting all goals and objectives.
- Team began drafting recommendations to amend the Plan at the April meeting.
- Team has continued to work on recommendations since the April 2018 meeting.



# False Killer Whale Take Reduction Team

Recommendations under consideration by the Team include:

- Gear modifications (hook and branchlines)
  - 4.2 mm diameter hooks
    - Hook study to evaluate effects to fishery
  - 2.3 mm diameter branchline

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  - To evaluate handling during interactions

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- Electronic monitoring
  - To evaluate handling during interactions
- Move-on guidelines
  - Vessels move a specified distance following a FKW interaction



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# Questions?

