

False Killer Whale Take Reduction Team: Brainstormed Range of Ideas | Nov 2022

EARLY WORKING DRAFT

Possible Measures and Approaches	Description
Gear Weak Hook - Strong Branchline	<ul style="list-style-type: none"> Modify the hook-branchline gear combination to make hook weaker or branchline stronger Need to create constant tension to straighten hooks
Gear Multi-purpose: "Myking- Westbrook/Gizmo" - Fighting Line and Cutter	<ul style="list-style-type: none"> New gizmo to slide down the line; includes fighting line to create tension in attempt to bend hook, but can cut line near whale if can't bend hook Includes fightingline to lessen tension on branchline, reduce flyback If hook can not be straightened line cutter to minimize remaining gear on the whale
Gear Leader	<ul style="list-style-type: none"> Standardized leader length to better estimate trailing gear on animal
Gear Fighting Line	<ul style="list-style-type: none"> Typically made of rope, can help unbend the hook and lessen tension on branchline to minimize breaking
Gear Long-handled pole line-cutting device	<ul style="list-style-type: none"> Use a long handled pole, line-cutting device to cut line close to the whale if unable to straighten the hook to reduce the amount of trailing gear.
Gear Strengthen Line	<ul style="list-style-type: none"> Change from 2.0 to 2.3 mm minimum branchline to address branchlines breaking, possible "weakest" part of the system
Gear Camera on gear	<ul style="list-style-type: none"> Cascadia Research Collective camera prototype to capture information about where the interaction and hook location, animal behavior
Deterrents Pingers	<ul style="list-style-type: none"> Pingers will startle the animal after hooked and potentially apply tension to the line and straighten hook; unclear effectiveness; potential to act as dinner bell
Deterrents Chain device/spider	<ul style="list-style-type: none"> Something to put on branchline to protect catch
Deterrents / Misc. Manage discards Shiny objects	<ul style="list-style-type: none"> Want to eliminate any actions that may be supporting "dinner bell" behavior Shiny spoon at the eye of hook to protect bait
Effort Controls Reduce effort	<ul style="list-style-type: none"> Reduce fishing effort with MSI>PBR, need to explore actions that correlate with higher takes; M&SI increasing as fishery effort expands
Dynamic Closures / Management Areas SEZ? North EZ	<ul style="list-style-type: none"> Revisit size, location, duration, and triggers for Southern Exclusion Zone Potential for other management areas
Add Short Line Fishery	<ul style="list-style-type: none"> Consideration of including Shortline fishing within the scope of the TRP. Engage SL (invite a member to attend/serve on TRT?)
Existing SEZ	<ul style="list-style-type: none"> Discussion of potential conservation benefits of SEZ. Serves as a backstop if other measures are not effective. Potential for bargaining for other measures. i.e. tradeoffs for SEZ opening/access. Potential to change the timeframe/season of SEZ closure.
Observer Program	<ul style="list-style-type: none"> Change data entry forms, Collect hooks from interactions, potentially to obtain genetic samples
Electronic Monitoring More cameras?	<ul style="list-style-type: none"> Discussion on information the EM is able to collect, goals of EM program. TRT interest in handling of FKW interactions Discussion on cost of implementation
O&E - Crew Training Deck Boss training	<ul style="list-style-type: none"> Emphasis on deck boss and crew training in addition to captains, if captain not present. Handling recommendations. Discussion of hands on training rather than videos. Important aspect to get buy-in from fishery. Important to be coupled with gear and handling recommendations
Misc. Genetics	<ul style="list-style-type: none"> Immediately obtain a biopsy sample of a hooked whale for genetic information to determine stock, gender etc..
Research (beyond early 2023 mtg) FKW Behavior/Biology Acoustics Gear change etc.	<ul style="list-style-type: none"> What boat noise attracts FKWs? (hydraulics, hauling, cavitation?) Can noise be dampened? What is the noise profile? Multivariates (bird activity)? More parsing of acoustic data and study on why some boats have higher depredation rate than others; try to parse out best management practices to minimize the attraction Extent of social learning spreading through the population?

- Where is the hook on the whale? How does the whale respond?
- Depredation (bait v. catch)
- Where is the weak point(s) in the system? Lifespan considerations?
Monofilament, swivel, crimps, hook? How could they be modified (to ensure the hook is the weak pt)?
- Artificial bait?
- Break down M&SI before and after SEZ closure; whether higher diameter mono would provide a better option for trying to straighten hook?
- Extent of branchline tangles?
- Review Warren et al. 2013 table – types of bycatch mitigation measures used across fisheries?
- Identifying and understanding drivers for “hot spots” for depredation/FKW interactions



**NOAA
FISHERIES**

Pacific Islands Regional Office
Protected Resources Division

False Killer Whale Take Reduction Team Meeting

Monday November 7th - Thursday November 10th, 2022

'Alohilani Resort Waikiki, O'ahu, Hawai'i

2490 Kalākaua Ave, Honolulu, HI 96815

Meeting Space: Bluefin, Third Floor

[LINK TO: Google Drive: Prereads & Presentations](#)

Meeting Purpose:

- Opportunity to reconnect as a Team and meet new members (non-decisional meeting)
- Review and consider implications of latest data and studies related to false killer whale interactions
- Assess effectiveness of current plan and brainstorm potential management and other measures; discuss strengths and challenges of different approaches
- Identify additional data and analysis needed to support Team discussions in early 2023

Monday November 7th, 2022 | 1:00 – 5:30 PM

Day 1 Goal: Understand the context and charge for Team deliberations

1:00 Welcome and Meeting Overview

- ❖ Meeting Objectives– NOAA Staff
 - Sarah Malloy – *Acting Regional Administrator*
 - Dawn Golden – *Assistant Regional Administrator*
- ❖ Agenda and Ground Rules Overview – *Consensus Building Institute*
- ❖ Reconnecting Icebreaker

2:00 Context for Team Deliberations

- ❖ High Level Review of False Killer Whale Take Reduction Plan (10 min)
 - Elena Duke – *Take Reduction Team Coordinator*
- ❖ Status in meeting Plan and MMPA goals (10 min)
 - Review of Abundance and interaction data – Erin Oleson, *PISFC*
- ❖ Agency Charge to Team (5 min)
 - Kim Damon-Randall – *Director Office of Protected Resources*
- ❖ Opportunity for Team questions and discussion (15 min)

2:40 Break

3:00 Context for Team Deliberations (continued)

- ❖ General measures used to address marine mammal bycatch and depredation in longline fisheries (pelagic and demersal) (15 min)
 - Andy Read & others
- ❖ Management measures considered at FKWTRT 2018 meeting (5 min)
 - Bennett Brooks
- ❖ *Opportunity for Team questions following both presentations (15 min)*

- ❖ Recent industry education and outreach efforts to captains and crew (15 min, including Q&A)
 - Savannah Lewis, *Sustainable Fisheries Division*
 - Eric Kingma, *Hawaii Longline Association*

- ❖ Fishery management changes under the Pelagic FEP (10-15 min, including Q&A)
 - Asuka Ishizaki – *WPFMC*

- ❖ High-level review of ongoing and completed research, including FY21-22 FKW appropriations (45 min, including Q&A)
 - Erin Oleson, *Pacific Islands Fisheries Science Center*

5:00 Public Comment

5:15 Wrap-Up, Next Steps and Day Two Preview

- ❖ Review logistics for AM field trip to Pier 38

5:30 Adjourn

6:00 PM – 7:30 PM – Team No-Host Social Hour

Swell Restaurant and Pool Bar

'Alohilani Resort Waikiki, O'ahu, Hawai'i
2490 Kalākaua Ave, Honolulu, HI 96815

Tuesday November 8th, 2022 | 6:30 – 5:30 PM

Day 2 Goal: Get out in the field together, consider implications of recent studies, data and practices, and begin assessing strengths and limitations of current Plan approach

6:30 Meet at Pier 38 (Auction tour view longline gear, visit with captains, breakfast)

- ❖ Note: Please depart the hotel in time to arrive at Pier 38 by 6:30 a.m. (Meet at 5:50a in hotel lobby to carpool)
- ❖ Note: We will return to the hotel between 9:45 and 10 a.m.

10:15 Welcome and Day Overview

- ❖ Review agenda
- ❖ Opportunity for reflections from Day 1

10:30 Additional Discussion: Recently Completed Research Results

- ❖ Erin Oleson – *Pacific Islands Fisheries Science Center*
- ❖ Opportunity for additional discussion and information on research results shared on Day One

11:15 Observer interaction reports

- ❖ Elena Duke- *Take Reduction Team Coordinator*
- ❖ Overview of key trends and observer interaction recent reports
- ❖ Initial Team member discussion

Lunch 12:00 PM – 1:15 PM

1:15 Pacific Islands Fisheries Science Center Electronic Monitoring

- ❖ Jennifer Stahl – *Pacific Islands Fisheries Science Center*
- ❖ Overview of Electronic Monitoring & potential for detecting and determining post-release condition of cetaceans in Hawaii longline fisheries.
- ❖ Opportunity for Team member questions and discussion

2:00 Implications of SEZ study

- ❖ Brief review of key findings
- ❖ Initial Team member discussion

2:45 Implications of weak hook study

- ❖ Brief review of key findings
- ❖ Initial Team member discussion

3:30 Break

3:50 Team Discussion: Assessing the Current Plan

- ❖ Breakout Round: Cross-caucus discussion on current plan – strengths, limitations, near-term data and research needs to inform Team discussions (60 min)
- ❖ Plenary report back and brief discussion (20 minutes)

5:10 Public Comment

5:25 Wrap-Up, Next Steps and Day Three Preview

5:30 Adjourn

Wednesday November 8th, 2022 | 8:30 – 5 PM

Day 3 Goal: Begin to brainstorm possible approaches and measures for achieving the plan goal and making the plan more effective

8:30 Welcome and Day Overview

- ❖ Review agenda
- ❖ Opportunity for reflections from Day 2
- ❖ Report back on any information requests

9:00 Brainstorming Potential Changes to the Plan

- ❖ Breakout Round: Cross-caucus discussions to start brainstorming potential changes to plan (approach, initial thoughts on potential measures, research and analysis needs, etc.)

10:30 Break

10:45 Brainstorming Potential Changes to the Plan

- ❖ Plenary Discussion: Share and discuss key points from cross-caucus breakout sessions

Lunch 12:00 PM – 1:15 PM

1:15 Continue Brainstorming Potential Changes to the Plan

- ❖ Continue Team discussions on brainstorming potential changes to plan (approach, initial thoughts on potential measures, research and analysis needs, etc.)
- ❖ In plenary and/or breakout discussions

2:45 Break

3:00 Continue Brainstorming Potential Changes to the Plan

- ❖ Continue Team discussions on brainstorming potential changes to plan (approach, initial thoughts on potential measures, research and analysis needs, etc.)
- ❖ In plenary and/or breakout discussions

4:30 Public Comment (15 min)

4:45 Wrap-Up, Next Steps and Day Four Preview

5:00 Adjourn

**6:30-8:30 pm: Team No-Host Dinner
Tiki's Grill & Bar**

Aston Waikiki Beach Hotel
2570 Kalakaua Honolulu, HI 96815

Thursday November 9th, 2022 | 8:30 – 1 PM

Day 4 Goal: Conclude brainstorming on possible approaches and measures for achieving the plan goal and making the plan more effective; identify steps needed to prepare for 2023 in-person meeting

8:30 Welcome and Day Overview

- ❖ Review Day 4 agenda
- ❖ Opportunity for reflections from Day 3
- ❖ Report back on any Team data and information requests

9:00 Brainstorming Potential Changes to the Plan – Part 3

- ❖ Wrap up Team discussions on brainstorming potential changes to plan (approach, initial thoughts on potential measures, research and analysis needs, etc.)
- ❖ In plenary and/or breakout discussions

10:45 Break

11:00 Looking Ahead: Preparing For 2023 Meeting

- ❖ Discuss and confirm any interim data needs, analysis and/or Team webinars needed prior to in-person Meeting #2
- ❖ Consider other needed preparation steps

12:00 Reflections on Meeting #1

- ❖ Small-group breakouts to reflect on meeting: what worked well, what should we do different
- ❖ Report backs

12:30 Public Comment

12:45 Meeting Wrap-up and Next Steps

1:00 Adjourn