

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

## EARLY WORKING DRAFT

Possible Measures and Approaches	Description
<b>Gear</b> Weak Hook - Strong Branchline	<ul style="list-style-type: none"> <li>Modify the hook-branchline gear combination to make hook weaker or branchline stronger</li> <li>Need to create constant tension to straighten hooks</li> </ul>
<b>Gear</b> Multi-purpose: "Myking- Westbrook/Gizmo" - Fighting Line and Cutter	<ul style="list-style-type: none"> <li>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</li> <li>Includes fightingline to lessen tension on branchline, reduce flyback</li> <li>If hook can not be straightened line cutter to minimize remaining gear on the whale</li> </ul>
<b>Gear</b> Leader	<ul style="list-style-type: none"> <li>Standardized leader length to better estimate trailing gear on animal</li> </ul>
<b>Gear</b> Fighting Line	<ul style="list-style-type: none"> <li>Typically made of rope, can help unbend the hook and lessen tension on branchline to minimize breaking</li> </ul>
<b>Gear</b> Long-handled pole line-cutting device	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Gear</b> Strengthen Line	<ul style="list-style-type: none"> <li>Change from 2.0 to 2.3 mm minimum branchline to address branchlines breaking, possible "weakest" part of the system</li> </ul>
<b>Gear</b> Camera on gear	<ul style="list-style-type: none"> <li>Cascadia Research Collective camera prototype to capture information about where the interaction and hook location, animal behavior</li> </ul>
<b>Deterrents</b> Pingers	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Deterrents</b> Chain device/spider	<ul style="list-style-type: none"> <li>Something to put on branchline to protect catch</li> </ul>
<b>Deterrents / Misc.</b> Manage discards Shiny objects	<ul style="list-style-type: none"> <li>Want to eliminate any actions that may be supporting "dinner bell" behavior</li> <li>Shiny spoon at the eye of hook to protect bait</li> </ul>
<b>Effort Controls</b> Reduce effort	<ul style="list-style-type: none"> <li>Reduce fishing effort with MSI&gt;PBR, need to explore actions that correlate with higher takes; M&amp;SI increasing as fishery effort expands</li> </ul>
<b>Dynamic Closures / Management Areas</b> SEZ? North EZ	<ul style="list-style-type: none"> <li>Revisit size, location, duration, and triggers for Southern Exclusion Zone</li> <li>Potential for other management areas</li> </ul>
<b>Add Short Line Fishery</b>	<ul style="list-style-type: none"> <li>Consideration of including Shortline fishing within the scope of the TRP. Engage SL (invite a member to attend/serve on TRT?)</li> </ul>
<b>Existing SEZ</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Observer Program</b>	<ul style="list-style-type: none"> <li>Change data entry forms, Collect hooks from interactions, potentially to obtain genetic samples</li> </ul>
<b>Electronic Monitoring</b> More cameras?	<ul style="list-style-type: none"> <li>Discussion on information the EM is able to collect, goals of EM program. TRT interest in handling of FKW interactions</li> <li>Discussion on cost of implementation</li> </ul>
<b>O&amp;E -</b> Crew Training Deck Boss training	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Misc.</b> Genetics	<ul style="list-style-type: none"> <li>Immediately obtain a biopsy sample of a hooked whale for genetic information to determine stock, gender etc..</li> </ul>
<b>Research (beyond early 2023 mtg)</b> FKW Behavior/Biology Acoustics Gear change etc.	<ul style="list-style-type: none"> <li>What boat noise attracts FKWs? (hydraulics, hauling, cavitation?) Can noise be dampened? What is the noise profile? Multivariates (bird activity)?</li> <li>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</li> <li>Extent of social learning spreading through the population?</li> </ul>

- 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**