

**False Killer Whale Take Reduction Team  
Meeting #1, February 17-19, 2010  
Honolulu, HI**

**KEY OUTCOMES MEMORANDUM**

**I. OVERVIEW**

The National Marine Fisheries Service (NMFS) held the first meeting of the False Killer Whale Take Reduction Team on February 17-19, 2010, in Honolulu, Hawaii. (See **Attachment 1** for a copy of the agenda.<sup>1</sup>) The meeting focused on the following objectives:

- Introduce TRT members and staff
- Review project goals and approach
- Provide common understanding: population estimates, serious injury and mortality estimates, species behavior, fisheries practices, etc.
- Understand Team members' underlying interests and aspirations
- Initiate discussions related to possible elements to include in a Take Reduction Plan
- Consider information needs to support Team deliberations
- Outline next steps

This meeting summary is presented in five main sections: Overview, Participants, Meeting Materials, Key Outcomes, and Next Steps. The Key Outcomes section is further segmented into the following:

- **Welcome and Introduction.** This section provides a brief overview of meeting, purpose, agenda overview and ground rules.
- **Background Briefings and Presentations.** This section summarizes the various briefings presented at the meeting outset.
- **Overarching Themes.** This section summarizes the results of the team's brainstorming and deliberations over the three-day meeting. Any recommendations or actions agreed to by the Team are called out in this section.

Additionally, a number of meeting materials are included as attachments.

**II. PARTICIPANTS**

The meeting was attended by nearly the entire Team: seventeen of the nineteen full Team members and one alternate. Participants included the following: William Aila, Robin Baird, Steve Beverly, Brendan Cummings, Paul Dalzell, Sharon Young, Hannah Bernard, Ryan Steen,

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<sup>1</sup> In addition to the main meeting, an orientation session was held the morning of February 17 for those who did not attend the November pre-meeting. As well, there were two optional field trips conducted before and after the Team's February 19 deliberations: one to the Honolulu fish auction and the longline vessel *Katy Mary* (owned by Vessel Management Associates); the other to observe Kina, a captive false killer whale, at the University of Hawaii's Hawaii Institute of Marine Biology facilities on Coconut Island.

Clint Funderburg, John Hall, Kristy Long, Kris Lynch, Paul Nachtigall, David Nichols, Tory O’Connell, Andy Read and Lance Smith. John LaGrange attended as an alternate in place of Jerry Ray, and only one Team member – Roger Dang – was not in attendance.

Lisa Van Atta and Nancy Young, both with NMFS Pacific Islands Regional Office (PIRO), and Erin Oleson and Karin Forney, with the Pacific Islands and Southwest Fisheries Science Centers, respectively, also joined in Team deliberations. Scott McCreary and Bennett Brooks from CONCUR, an environmental dispute resolution firm specializing in marine resource and water issues, served as the neutral facilitators. As well, about 20 people, including staffers from NMFS, NOAA Office of Law Enforcement, the U.S. Coast Guard and other entities, attended all or part of the meeting.

### **III. MEETING MATERIALS**

Extensive meeting materials were provided to support the group’s deliberations. Virtually all meeting materials were sent out ahead of time, but some documents and all presentation material were distributed as handouts. (A detailed listing of materials is included as **Attachment 2.**) All materials are available on the web at <http://www.nmfs.noaa.gov/pr/interactions/fkwtrt/>.

### **IV. KEY OUTCOMES**

Below is a summary of the main topics and issues discussed. This summary is not intended to be a meeting transcript. Rather, it provides an overview of the main topics covered, the primary points and options raised in the discussions, and areas of full or emerging consensus.

#### **A. Welcome and Introductions**

The meeting began with a welcome by Lisa Van Atta, PIRO Assistant Regional Administrator for Protected Resources, who thanked participants for their participation and commitment. This was followed by a brief overview of the meeting purpose, self-introductions, and a review of the meeting agenda. The Team next reviewed draft Ground Rules prepared by CONCUR and – after making revisions to the Media Contact ground rule to more clearly delineate guidelines related to general media contacts versus false killer whale take reduction-focused inquiries – participants unanimously ratified the guidelines. (The revised ground rules are included as **Attachment 3.**)

The opening discussion also included a chance for Team members to voice their expectations for the process and underscore their primary objectives. Comments centered on the following:

- Broad support for the process, with participants emphasizing the opportunity to make an impact both in Hawaii and in fisheries worldwide striving to successfully address issues related to marine mammal depredation and bycatch. Several participants underscored the importance of participants setting aside their traditional roles and working collaboratively to find workable solutions.
- Interest in finding creative gear solutions, potential fixes tied to passive deterrence, and improving future abundance and PBR estimates for false killer whale stocks.

- Optimism based on (1) the Hawaii longline fleet's demonstrated ability and willingness to identify and commit to address tough bycatch issues; and (2) the shared interest among fishermen and conservationists to reduce bycatch.
- Potential to resolve differences through new strategies that fix the underlying problems and minimize the likelihood of time-consuming and expensive lawsuits.
- The need to consider solutions at four different conceptual levels: avoiding overlap between whales and the fishery (in time and space); avoiding interaction (if whales and longliners are in the same areas); avoiding hookings and entanglements (if interactions occur); and avoiding serious injuries (if hookings or entanglements result).
- Strong interest in having Team members visit longline boats and see fishing gear to ensure deliberations are rooted in the reality of the fishery's mechanics.
- Recognition that the six-month timeframe gives the Team an opportunity to make a good start, yet an awareness that longer-term fixes – focused both at minimizing interactions and improving abundance estimates – will necessitate a longer time horizon and additional deliberations.

Finally, several participants noted that the Team, as composed, brings the appropriate interests to the table – both Team members and supporting staff (NMFS and others).

## **B. Background Briefings and Presentations**

The meeting included focused updates on a number of topics. Below is a quick synopsis of the topics covered. (Broader discussion themes based on these presentations are captured in Section C below.) As noted earlier, copies of all presentations are available on-line.

- ***False Killer Whale Take Reduction Process Overview.*** K. Long and N. Young with NMFS provided a brief overview of the Take Reduction Team process, emphasizing Plan goals and content, participant roles, and the overall Team timeline.
- ***False Killer Whale Take Reduction Team Scope.*** N. Young summarized the Team's proposed scope as listed in the *Federal Register* (FR) notice, noting both the fisheries and stock to be included and presenting the underlying rationale for what is and is not included. She further noted the opportunities for the Team to consider other stocks and fisheries not formally included in the scope.
- ***Background Information: False Killer Whale Assessments and Biology.*** K. Forney and E. Oleson provided a brief overview of the false killer whale assessment and biology information presented in greater detail at the November 2009 pre-TRT meeting. The presentations included information on false killer whale stock structure, insular and pelagic stock overlap, species movement patterns and echolocation behavior.
- ***Overview: Observer Program and Fisheries-False Killer Whale Interactions.*** K. Forney presented an overview of the NMFS Observer Program and fisheries-false killer whale interactions, which included information on observer program protocols, observer data forms used, and frequency of depredation and marine mammal takes. The presentation also included a summary of takes by time of year and location, as well as

Observer Program videos showing false killer whale interactions with longline fishing gear and their behavior around longline vessels.

- ***Stakeholder Assessment Summary.*** B. Brooks and S. McCreary presented an overview of key findings from their confidential interviews conducted with a wide range of stakeholders prior to the TRT’s formal convening. CONCUR’s synthesis centered on interviewees’ recommendations for structuring Team deliberations, sharing information, and initial ideas for reducing takes of false killer whales.
- ***Hawaii Longline Fishery.*** Team member P. Dalzell provided a detailed overview of the Hawaii longline fishery, summarizing trends related to fleet size, number of trips, hooks, and catch type, size and value. Additionally, his remarks included information on fishing tactics and gear, related regulations, and fleet ownership and characteristics by ethnicity.
- ***Lessons Learned.*** In response to stakeholder interest in “not reinventing the wheel” – a comment heard frequently in CONCUR’s stakeholder interviews – several presentations focused on summarizing lessons learned from other fisheries striving to address depredation and marine mammal bycatch issues. Presentations included the following:
  - ***Mitigating cetacean depredation.*** E. Oleson summarized lessons learned from other efforts worldwide to better understand and identify effective strategies for mitigating marine mammal depredation. Her presentation focused on two general topics – behavioral insights and mitigation strategies – and called out both promising and problematic findings. Her presentation drew on, among other things, the 2006 Vancouver Depredation Symposium, Geoff McPherson’s recent acoustic-related work, the Western Pacific Regional Fishery Management Council’s Marine Mammal Advisory Committee, and the 2007 Seychelles Depredation Workshop.
  - ***Take Reduction Teams.*** K. Long summarized actions and approaches adopted as part of take reduction plans developed by other teams. Her presentation highlighted both regulatory and non-regulatory measures, including gear modifications, changes in fishing practices, fishery-specific limits, time and/or area closures, training and/or certification workshops, marine mammal and fishery research, monitoring, and enforcement.
  - ***Atlantic Pelagic Longline Take Reduction Team.*** Laura Engleby, Marine Mammal Branch Chief with NMFS’s Southeast Regional Office, presented a detailed overview of the Atlantic Pelagic Longline Take Reduction Team’s approach to reducing marine mammal takes in the East Coast longline fishery. The presentation offered a comprehensive overview, highlighting: background and impetus; scope and goal; challenges; strategies for reaching consensus; and the eventual regulatory and non-regulatory aspects of the Plan. A key aspect of L. Engleby’s presentation focused on the use of predictive models to assess the potential impact on takes of possible gear modifications and fishing practices.

- ***Assessment of Patterns in Observer Data.*** K. Forney presented some first-cut findings of a data-mining exercise to assess patterns in the Observer Program data collected between 2003 and mid-2009. Though preliminary in nature, the review of the data suggested several areas meriting a closer look. These included the potential impact of seasonality, hook type, and soak time. K. Forney underscored the need for further analysis and input from Team members to better assess and understand potential patterns.

### C. Overarching Themes

The Team's deliberations over the course of the three-day meeting generated a number of overarching themes. These themes aggregated into a handful of categories: (1) Team process/focus; (2) underlying abundance estimates; (3) possible mitigation strategies; (4) Observer Program data (5) research needs; and (6) other. Below is a synthesis of the Team's key discussion points.

#### **Team Process/Focus**

Presentations generated extensive Team discussions and feedback on the Team's upcoming work – both the focus of its deliberations and various strategies for supporting productive discussions. Key themes focused around the following topics:

- ***Scope Concerns<sup>2</sup>.*** Several Team members voiced concern regarding the scope as outlined in the FR notice. The most significant concern centered on including the insular stock, with one Team member suggesting the scope should not include the insular stock as the added task risked diverting Team focus from the pelagic stock. The Team member further suggested that including the insular stock falls short of meeting MMPA standards as there are no documented interactions between insular false killer whales and the longline fleet<sup>3</sup>, nor have any insular false killer whales been tracked beyond the longline exclusion zone. Another Team member voiced concern regarding the absence of recreational charter boats. (K. Long noted that, under the MMPA, the take reduction process applies only to commercial fisheries.) NMFS staff reminded Team members that any formal comments on Team scope are to be submitted by 5 pm (EST) on February 18.
- ***Distinction Between Near-Term and Longer-Term Solutions.*** A number of Team members emphasized the importance of distinguishing between actions likely to generate the critical near-term results (i.e., reduce mortalities and serious injuries below PBR) and those candidate actions likely to yield a longer-term return (e.g., reducing takes to levels approaching zero mortality, improving abundance estimates, etc.) These distinctions are critical, several participants said, as the Team's immediate task is to successfully address the near-term challenge.

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<sup>2</sup> It is worth noting that several Team members who submitted written comments to NMFS opted not to voice their comments again during the Team meeting. Lack of comment during the meeting should not necessarily be interpreted as endorsement of the scope as put forward by NMFS.

<sup>3</sup> Another Team member noted that, while there are no documented interactions between insular false killer whales and the longline fleet, genetic samples are only available for a small number of takes.

- ***Need to Identify Concrete Near-Term Actions.*** Team deliberations highlighted the importance of generating a suite of near-term actions that can, to the extent possible, be expected to reduce false killer whale takes below PBR. Team members noted that the eventual recommendations are likely to encompass a range of actions – regulatory and non-regulatory, highly quantifiable and less quantifiable – but the intent should be to craft a package that NMFS can accept based on its follow-on analysis of the expected impact. Some Team members were interested in the predictive model developed to support the Atlantic Pelagic Take Reduction Team’s deliberations and asked that a similar model be developed to support its work. (K. Forney noted that she intends to use the Observer Program data to develop such a model in support of the Team’s work.)
- ***Importance of Early-On Brainstorming.*** Several participants encouraged Team members to – in the early phase of discussions – brainstorm a wide range of possible options, noting that early-on recommendations in other teams that were dismissed as being unworkable (i.e., pingers) proved to be a key to reducing takes. At the same time, several comments stressed that the Team’s deliberations take into account the viability of any potential action (will it be effective, practical, safe, enforceable, impact bycatch or target catch, etc.). Several team members agreed that these questions are crucial, but recommended they be engaged later in the process. To that end, Team members asked that its work be supported by the Coast Guard, law enforcement, and others able to advise on candidate actions’ viability.
- ***Fishing Industry Input Key.*** Several Team participants emphasized the importance of garnering extensive input from the broader longline fishing community – both to inform the Team of mitigation measures already in use and to provide feedback on the viability of ideas developed during Team discussions. This feedback, Team members said, needs to span the full ethnic make-up of the longline fishery. Fishing representatives around the table agreed to work aggressively to engage the broader fishing community. Team members also encouraged NMFS to foster an outreach effort (though participants agreed that the fishing representatives around the table – and not NMFS – will likely be more effective in engaging fishermen.)
- ***Other.*** The Team’s discussions generated other topics related to process and focus, such as:
  - Interest in understanding how cost is factored into Team deliberations. (Answer: Cost-effectiveness of potential fixes is not formally factored in until takes are below PBR.)
  - Noting the potential for Team members to advocate for adequate funds to support Team recommendations (though it was noted that this effort would need to be done independent of a formal Team recommendation or action).
  - Clarifying that only full Team members – and not alternates – get to formally weigh in on Team support for proposed recommendations (unless, of course, the full Team member is not present). B. Brooks with CONCUR also emphasized that full Team members are expected to participate in all meetings unless they have unavoidable constraints.

### **Abundance Estimates**

Several Team members expressed concern that the abundance and bycatch estimates underpinning the establishment of the Team are not statistically sound, and they pressed for different methods to calculate these figures. Specific concerns about the data focused on the following: (1) abundance estimates are based on soon-to-be “stale “ (i.e., nearly eight-year-old) data; (2) current levels of genetic sampling are not sufficient to distinguish stocks other than the insular stock; (3) the full range of overlap between the insular and pelagic stock is not well established; (4) the Team does not have the benefit of the 2010 SAR figures to inform its deliberations; (5) calculations of PBR are overly precautionary; (6) abundance estimate methodologies may underestimate false killer whale population estimates.; and (7) bycatch estimates may be negatively skewed as bycatch coded as “blackfish” are not incorporated into the false killer whale data.

NMFS staff acknowledged the potential to strengthen the underlying data and encouraged the Team to recommend strategies for longer-term improvements. (Team member recommendations for strengthening these data are included in the research recommendations section below.) But, NMFS staff said, the Team is required under the MMPA to use the best available science to inform its deliberations (in this case, the 2009 Stock Assessment Report, or SAR). Additionally, NMFS noted that it hopes to make available data from the draft 2010 SAR in time to inform the Team’s near-term deliberations. Finally, NMFS offered to provide feedback at a later date on the legal and practical ramifications of the concern tied to NMFS’s aging underlying data. Staff also emphasized that while the abundance and PBR estimates contain a number of uncertainties, the figures included in the SAR are based on established methodologies and best practices and there is no evidence to suggest abundance estimates are biased in any direction.

### **Mitigation Strategies**

The bulk of the Team’s initial deliberations centered on early brainstorming related to possible mitigation strategies. In discussing possible actions, Team members suggested a handful of cross-cutting recommendations and parameters to guide the Team’s thinking.

- Conceptualize actions as addressing one of four different scales: avoiding overlap; avoiding interaction; avoiding hookings and entanglements; and avoiding serious injuries. This approach was also summarized as identifying candidate actions that can “avoid,” “deter,” and “protect.”
- Take into account other regulatory requirements and considerations when devising strategies to reduce false killer whale takes. For example, the Team needs to make sure actions intended to protect false killer whales do not unintentionally undermine or run contrary to existing efforts to protect seabirds or turtles.
- Recognize the extent to which a range of strategies and approaches – and not just one quick fix – are likely to be needed to meet the near-term goal. To that end, explore multiple paths early on.
- Rely on local fishermen’s expertise and past practices to inform the Team’s deliberations.

The Team's deliberations centered on a range of possible fixes, with initial suggestions centering on gear modifications, vessel lights and acoustics, early detection of the presence of whales, and improved communications within the fleet. Below is a table summarizing the range of actions mentioned by Team members.

| <b>List of Mitigation Ideas Brainstormed During FKWTRT Meeting</b><br><i>(List is intended to spark discussion only; the Team did not endorse any particular ideas nor are candidate actions presented in any type of ranked order)</i> |   |
|---|---|
| <b>Category</b>   | <b>Possible Action</b>  |
| Strategies to reduce false killer whale chances of finding vessels  | <ul style="list-style-type: none"> <li>- Lower-profile deck lighting</li> <li>- Intermittent use of spotlights instead of constant lighting to find buoys</li> <li>- Intermittent lights on buoys</li> <li>- Use of oceanographic buoys (NMFS, naval, other) to foster location and avoidance of FKW</li> <li>- Real-time fleet communication to foster avoidance of whales</li> <li>- Use of hydrophones from longliners to identify presence of FKW</li> <li>- Annual haul-out to reduce vessel noise profile (change rudder, cutlass bearing, etc.)</li> <li>- Degaussing of steel boats (demagnetize)</li> <li>- Direct current through vessel hull to eliminate electric profile</li> <li>- Diminish hydraulic profile (pumps, hoses, reel, steering) to background levels</li> <li>- Decoy buoys</li> </ul> |
| Strategies to minimize active depredation   | <ul style="list-style-type: none"> <li>- Small solid structures (i.e., plastic beads) to alter acoustic target profile of bait/catch</li> <li>- Streamers deployed alongside hook to change acoustic target profile of bait/catch</li> <li>- Different leaders to change acoustic target profile</li> <li>- Use of nails/metal tabs in bait tail to change acoustic target profile</li> <li>- Revised rules to allow fishermen to retain gills/guts on board</li> <li>- Offal processed on-board into an on-vessel commodity</li> <li>- Retention of bait during haul</li> <li>- Limits on line length and/or soak time</li> <li>- Vessel shift in location/tactics once whales are spotted</li> </ul>  |
| Strategies to minimize hookings   | <ul style="list-style-type: none"> <li>- Expanded use of hook types, designs and sizes that reduce bycatch (i.e., circle hooks)</li> </ul>  |
| Strategies to minimize serious injuries and mortalities   | <ul style="list-style-type: none"> <li>- Use of weak hooks</li> <li>- Use of barbless hooks</li> </ul>  |

As noted earlier this summary, these ideas were put forward in the spirit of brainstorming and were not evaluated based on viability or acceptability at this point.

### **Research Activities**

The Team spent significant time identifying research needs. Below, however, is a brief synthesis of key research themes that emerged during the Team's discussions.

- The importance of distinguishing between near-term tasks needed to inform development of the Take Reduction Plan within the next few months and those longer-term tasks intended to improve abundance estimates and identify future mitigation measures. Near-term tasks focused primarily on further mining of observer data; identifying near-term gear changes that have the potential to reduce the likelihood of depredation; understanding the recent increase in depredation and takes; and assessing the impact on depredation and take rates of recent fleet movements to the north and east.
- As noted above, Team members expressed great interest in looking more deeply into the observer data to identify possible correlations and fixes. Discussion sparked several areas for further exploration, including the following: (1) looking at sets without depredation to identify shared characteristics; (2) identifying possible distinctions in the East-West break along Necker Ridge; (3) understanding the relationship between hook type and injury severity; (4) exploring depredation patterns by vessel ownership; (5) assessing links, if any, between catch rates and depredation; (6) assessing the extent to which there is any observer effect on data; and, (7) identifying boats that have never been "whaled." (As one Team member put it: The search for the unicorn.) Additionally, members suggested using vessel logbook data and, as needed, VMS data to create a richer database. Based on the discussion, K. Forney asked Team members to review the list of variables collected by observers and identify candidates to evaluate.
- Team members' interest in longer-term research tended to aggregate around the following topics: (1) improving abundance estimates and other underlying calculations and assumptions that determine overall species status and allowable take levels; (2) better understanding false killer whales' ability to echolocate vessels, hooks and prey; (3) better understanding the acoustic profile of longline vessels and their various systems and gear to inform masking strategies; (4) identifying modifications to leaders, hooks and other gear that can alter the acoustic target profile to deter false killer whale depredation; (5) better understanding false killer whale behavior, with a particular emphasis on understanding learned behavior – both positive and negative and across age ranges; and (6) sharpening classification of false killer whale echolocation and vocalizations (with an eye towards reducing false positives among other species). There was also interest in gathering data on the shortline and kaka line fisheries.
- Recognize that Team members can play a role – informally – in making the case to NMFS senior management and others to provide the resources necessary to undertake a robust and timely research agenda. (NMFS staff emphasized that any efforts along those lines needed to be undertaken independent of the Team.)

A detailed list of research needs are summarized in the table on page 11 under Next Steps.

### **Other**

Team deliberations raised numerous other issues not yet captured in the summary above. Below is a listing of some of the other issues and themes that emerged during the discussion.

- **Monitoring.** Team members expressed interest in better understanding how Plan effectiveness will be monitored and assessed. This is particularly pertinent, they said, as it is particularly difficult to assess changes in a fishery with very low levels of takes.
- **Compliance.** Several members underscored the critical importance of compliance – both in assessing the viability of a measure and in assessing the effectiveness of actions eventually adopted.
- **Data Requests.** Team members identified numerous data requests during the course of the meeting. These requests are summarized in the Next Steps section below.

## **V. NEXT STEPS**

### **A. Research Needs**

Based on Team discussions, K. Forney and E. Oleson on Day Three presented possible research needs sorted into three categories: (1) short-term information needs, to support the Team's April deliberations; (2) medium-term, to support the Team's deliberations over the next five months; and (3) longer-term, to support consideration of false killer whale issues over the next two years. Below is a synopsis of the needs summarized by K. Forney and E. Oleson, as well as comments provided by Team members.

| <b>Research Needs to Support False Killer Whale Take Reduction Team</b>   |  |  |  |
|---|--|--|--|
| <b>Short-Term – General<br/>(by April meeting)</b>  | <b>Short-Term – Observer Program Data<br/>(by April meeting)</b>   | <b>Mid-Term – General<br/>(over next four months)</b>  | <b>Long-Term – General<br/>(six months to two years)</b>   |
| <ul style="list-style-type: none"> <li>Assess changes in depredation before and after gill/gut Dec. 2004 regulations</li> <li>Determine extent to which false killer whales are able to drag hooks &amp; catch to surface if hooked at deepest part of set</li> <li>Understand which vessel characteristics serve as proxy for noise profile</li> <li>Compile information related to FKW echolocation capabilities</li> <li>Identify further insights from Geoff McPherson &amp; Tom Nishida</li> <li>Assess vessels using various light configurations</li> <li>Evaluate split sets</li> <li>Determine parity between observer and logbook datasets</li> <li>Elicit fisherman input into depredation avoidance techniques</li> </ul> | <ul style="list-style-type: none"> <li>Assess individual vessel effects (light, sound)</li> <li>Identify spatial-temporal patterns in distribution of effort and depredation</li> <li>Determine percent of boats with mixed hook types</li> <li>Identify within-set patterns of depredation and bycatch</li> <li>Tease out rates of false killer whale bycatch in sets/trips with/without depredation</li> <li>Determine depredation rates given soak time pattern relative to other variables</li> <li>Assess relationship between depredation and spacing of fishing vessels</li> <li>Supplement observer data with vessel logbook or VMS data, if possible</li> </ul> | <ul style="list-style-type: none"> <li>Develop photo-ID of pelagic-zone animals, including scars &amp; disfigurements</li> <li>Pursue additional satellite tagging (April)</li> <li>Develop acoustic characterization of insular vs. pelagic animals</li> <li>Develop predictive model of potential measures (take rate, depredation rate, target catch, fleet movements)</li> <li>Determine feasibility of mooring listening stations (FADs, NOAA weather buoys)</li> </ul> | <ul style="list-style-type: none"> <li>Conduct FKW-targeted research on the R/V Sette, September 2010</li> <li>Pursue longline acoustic monitoring</li> <li>Undertake photo-ID &amp; movement studies</li> <li>Examine echolocation, foraging and acoustic behavior using acoustic tags</li> <li>Conduct echolocation studies with respect to detection of hooks in fish</li> <li>Develop methods for pro-rating “blackfish” bycatch</li> <li>Pursue recording acoustic profile of individual longline vessels</li> <li>Undertake HICEAS II-Hawaii EEZ survey 2011</li> <li>Develop predictive habitat modeling</li> <li>Better understand mechanism of hooking</li> <li>Better understand adaptive learning by FKW, and particularly young animals</li> </ul> |

In comments following the presentation, Team members added the following suggestions:

*For short-term:*

- Gain access to non-confidential observer data for Team members.
- Better understand the percentage of boats that use uniform hook types. Such data, Team members said, would make it possible to compare depredation rates by hook type.
- Mine vessel logbook data to learn more about depredation activity.
- Understand set size to get better feel for the relationship between depredation and CPUE (catch per unit effort).
- Use observer data to identify individual vessels that have higher than average depredation and/or no depredation; look for factors that may be influencing varying depredation rates.

*For medium term:*

- Consider opportunity for fleet to use acoustic recorders to determine false killer whale presence.

- Begin collecting data on shortline/kaka line fishery – where fishing, how fishing, etc. This included a suggestion that NMFS consider strategies to provide observer coverage for these fisheries (either on-board or through alternative platforms).

*For longer term:*

- Consider more efficient/alternate ways to measure abundance.
- Move forward on industry support for engaging vessels in false killer whale photo identification.
- Consider ways Team members (external to NMFS) can generate funding/other support for 2011 survey.

## **B. Meeting Timeline**

CONCUR provided an overview of the Team's expected meeting schedule and focus between the February 17-19 meeting (Meeting #1) and the July 19, 2010, deadline for submitting a consensus take reduction plan to NMFS. Key dates are as follows:

- April 6-9: Meeting #2 (Maui)
- May 4-7: Meeting #3 (Big Island Kona side)
- Week of June 14: Meeting #4 (Kauai or Maui); three- to four-day meeting
- Mid-June to July 19: Team member review and confirmation of the final Draft TRP via email and/or teleconference

Additionally, CONCUR noted that work teams will be convened between meetings to develop ideas for discussion at the full Team meetings.

## **C. Work Teams**

Given the extensive work to be completed in the next few months, Team members agreed to form between-meeting work teams to generate options for further consideration. The work teams – open to all interested Team members and expected to begin meeting between now and the April meeting – are to be convened by teleconference; all materials developed as part of work team discussions will be shared with the Team for its full deliberation. Below is an overview of work group focus and participants.

- **Data Analysis/Mining Work Team:** Andy, Sharon, Robin, Ryan, Tory
- **Potential Solutions Work Team:** Hannah, Kris, Paul D., Clint, Andy, Tory, William, Steve, Brendan, John L. (possible), Robin (as observer only)
- **Outreach:** David, Paul D., Kris, Hannah, Robin, Ryan
- **Research Needs:** Paul N., Tory, Robin, Kris, Sharon, Paul D., David, John H.

Additionally, L. Van Atta, E. Oleson, P. Dalzell and A. Cole will meet to explore the viability of accessing VMS data, if needed, to support better understanding of observer data.

## D. Project Web Page

The Team briefly discussed the use of web pages to support False Killer Whale Team deliberations. NMFS staff noted that both PIRO and headquarters Office of Protected Resources have web pages set up to provide information related to the Team. Participants agreed that an additional mechanism – either a separate web page, email exchanges or an FTP site – is needed to support the Team’s sharing of draft materials. NMFS and CONCUR are to consider options and provide an update to the Team via email.

## E. Team Travel

CONCUR noted that travel and hotel arrangements for future meetings will be handled by NMFS. Several Team members expressed concern that NMFS-arranged travel is cumbersome and a significant detriment to participation. At least one Team member favored NMFS-arranged travel, as it eliminates the need to cover direct expenses upfront and then await reimbursement. K. Long is to explore options and provide an update to the Team via email.

## F. Next Steps

Based on the three-day meeting, participants agreed to a series of next steps to be completed prior to Meeting #2 in April. The table on the following page summarizes these activities.

| <b>False Killer Whale Take Reduction Team<br/>Primary Next Steps</b> |  |
|--|--|
| Interim Deliberations  | <ul style="list-style-type: none"> <li>• Convene Work Teams focused on Outreach (by early March), Data Analysis and Mining (by early March), Potential Solutions (by mid-March), and Research Needs (by late March); all Work Teams expected to convene via teleconference</li> <li>• L. Van Atta, E. Oleson, P. Dalzell and A. Cole to explore viability of accessing VMS data, if needed, to support better understanding of observer data</li> </ul>  |
| Information-Related  | <ul style="list-style-type: none"> <li>• Provide Team members with: (1) electronic copies of completed Observer take forms; (2) categories included on observer forms (to inform Team input into further analyses); and (3) vessel self-reports on takes, if any</li> <li>• Team members to provide input on further analyses based on Observer Program data</li> <li>• A. Read to provide, as possible, recent weak hook studies (Kerstetter, Gulf of Mexico)</li> <li>• P. Nachtigall to work with NMFS staff to provide relevant echolocation data</li> <li>• K. Forney to provide detailed spatial and temporal data on take locations</li> <li>• Solicit input from fishermen regarding past actions aimed at limiting depredation</li> </ul> |
| Logistics  | <ul style="list-style-type: none"> <li>• Determine approach to handle Team member travel and hotel arrangements</li> <li>• Identify web-based mechanism for Team to share draft documents</li> <li>• Provide Team members with electronic version of presentations (as appropriate)</li> <li>• Add alternate members to Team email string</li> </ul>   |
| Other  | <ul style="list-style-type: none"> <li>• CONCUR/PIRO to contact those individuals expected but unable to attend Meeting #1; assess future participation</li> <li>• HLA, others to undertake efforts to ensure longline fleet aware of and engaged in TRT issues</li> <li>• CONCUR to provide draft Key Outcomes by mid-March for review by Team</li> <li>• NMFS General Counsel to provide feedback on ramifications of “aging/stale” data</li> <li>• NMFS to consider request to appoint Eric Gilman as alternate for Steve Beverly</li> </ul>  |

Questions or comments regarding this summary should be directed to Bennett Brooks (212-678-0078 or [bennett@concurinc.net](mailto:bennett@concurinc.net)) or Scott McCreary (510-649-8008 or [scott@concurinc.net](mailto:scott@concurinc.net)).

## ATTACHMENT 1

### **False Killer Whale Take Reduction Team Kick-Off Meeting February 17-19, 2010: Sheraton Waikiki, Honolulu, Hawaii**

#### **AGENDA**

*(as of 2/17/10)*

#### **MEETING OBJECTIVES**

- Introduce TRT members and staff
- Review project goals and approach
- Provide common understanding: population estimates, takes, serious injury and mortality, species behavior, fisheries practices, etc.
- Understand Team members' underlying interests and aspirations
- Initiate discussions related to possible elements to include in a Take Reduction Plan
- Consider information needs to support Team deliberations
- Outline next steps

#### **DAY ONE, FEBRUARY 17: AFTERNOON<sup>1</sup>**

|  |                 |
|--|-----------------|
| <b>Arrival and Greetings</b>   | <b>12:45 PM</b> |
| <b>Welcome and Introductions</b>   | <b>1:00 PM</b>  |
| <ul style="list-style-type: none"> <li>○ Welcome and Opening Pule (<i>Van Atta, Aila</i>)</li> <li>○ Meeting Purpose (<i>CONCUR</i>)</li> <li>○ Self-Introductions</li> </ul>                              |                 |
| <b>Meeting Approach</b>  | <b>1:20 PM</b>  |
| <ul style="list-style-type: none"> <li>○ Review and confirm proposed Meeting Agenda (<i>CONCUR</i>)</li> <li>○ Review, revise and adopt proposed Ground Rules (<i>CONCUR</i>)</li> </ul>                   |                 |
| <b>False Killer Whale Take Reduction Process Overview</b>  | <b>2:00 PM</b>  |
| <ul style="list-style-type: none"> <li>○ Brief overview of project parameters (<i>K. Long, N. Young</i>)</li> <li>○ Initial opportunity for Team member comment on project aims and aspirations</li> </ul> |                 |

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<sup>1</sup> Note: There is a morning orientation session from 9 a.m. to 11:00 a.m. It is intended for TRT members who did not attend the November pre-meeting, but all interested Team members and public are welcome to attend.

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|  |                       |
|--|-----------------------|
| <b>False Killer Whale Take Reduction Team Scope</b>  | <b>2:40 PM</b>        |
| <ul style="list-style-type: none"><li>○ Present summary of and rationale for Team scope; synthesis of public comments received to-date (<i>N. Young</i>)</li><li>○ Clarifying questions and comments from Team members</li></ul>   |                       |
| <b><i>Break</i></b>  | <b><i>3:10 PM</i></b> |
| <b>Initial Discussion: Background Information</b>  | <b>3:30 PM</b>        |
| <ul style="list-style-type: none"><li>○ Review false killer whale assessments: stock structure, abundance, bycatch (<i>E. Oleson, 30 minutes total</i>)<ul style="list-style-type: none"><li>• Presentation, followed by questions and comments</li></ul></li><li>○ Overview of false killer whale biology, including acoustic capabilities (<i>E. Oleson, 40 minutes total</i>)<ul style="list-style-type: none"><li>• Presentation, followed by questions and comments</li></ul></li></ul> |                       |
| <b>Public Comments</b>   | <b>4:40 PM</b>        |
| <b>Preview of Day Two</b>  | <b>5:00 PM</b>        |
| <b>Adjourn</b>   | <b>5:05 PM</b>        |
| <b>Team Dinner</b> ( <i>location to be determined</i> )  | <b>6:30 PM</b>        |

**DAY TWO, FEBRUARY 18: FULL DAY****Arrival and Greetings** **8:15 AM****Welcome and Overview** **8:30 AM**

- Overview of Day Two agenda and focus (*CONCUR*)
- Questions and Comments from Day One (*PIRO, CONCUR*)

**Discussion: Background Information (*continued*)** **8:45 AM**

- Overview (*K. Forney, 40 minutes*)
  - Deep-set and shallow-set fisheries: effort, seasonality, key distinctions and overlap with cetacean takes
  - Observer Program data and nature of interactions between fishery and false killer whales
- Team member comments and questions (*20 minutes*)

**Break** **9:45 AM****Initial Discussion: Beginning the Search for Solutions** **10:00 AM**

- Briefing on Stakeholder Assessment (*CONCUR, 15 minutes total*)
  - Brief overview of key findings followed by stakeholder comments
- Understanding the Fisheries
  - Summary of longline fishery mechanics (*P. Dalzell, 25 minutes, including Q&A*)
    - Existing rules/regulations that shape fishery
    - Fishing practices/gear
    - Brief synthesis of ethnic composition of fishery
  - Team Discussion: Cultural aspects of fishery and potential implications for Take Reduction Plan approach (*20 minutes*)
- Lessons Learned (*E. Oleson, 60 minutes total, including 30 minute Q&A*)
  - Summary of key findings related to depredating cetaceans and potential mitigation strategies. Includes findings from Vancouver Symposium, MMAC, Fishermen Survey (TEC Report) and other relevant workshops/studies
  - Team member comments and questions

**Lunch****Noon**

**Initial Discussion: Beginning the Search for Solutions (*continued*)** **1:15 PM**

- Lessons Learned – Continued (*75 minutes total*)
  - Presentations
    - General overview of actions and approaches adopted by other Take Reduction Teams (*K. Long, 20 minutes total, including Q&A*)
    - Overview of approaches taken by the Atlantic Pelagic Longline Take Reduction Team (*L. Engleby, 55 minutes total, including Q&A*)
  - Team member comment and questions following each presentation
- Assessment of patterns in observer data (*K. Forney, 45 minutes total*)
  - Presentation
    - Summarize data sets, analysis and results of bycatch correlate re-analysis
  - Team member comment and questions during and after presentation

***Break*** **3:15 PM****Initial Discussion: Beginning the Search for Solutions (*continued*)** **3:30 PM**

- Team Member Initial Thoughts and Recommendations
  - Open discussion on Team member preliminary thoughts regarding possible management actions and approaches based on “*Lessons Learned*” discussion and other materials presented

**Public Comments** **4:55 PM****Preview of Day Three** **5:10 PM****Adjourn** **5:15 PM****Team Happy Hour (*location to be determined*)** **5:30 PM**

**DAY THREE, FEBRUARY 19: MORNING ONLY****Arrival and Greetings** **7:50 AM****Welcome and Overview** **8:00 AM**

- Overview of Day Three agenda and focus (*CONCUR*)

**Continued Discussion: Lessons Learned** **8:15 AM**

- Opportunity for Team members to fold in additional reflections based on Day Two “*Lessons Learned*” discussion; provide any updates on informal discussions and caucuses

**Discussion: Developing TRT Work Plan** **9:15 AM**

- Information Needs to Support Team Deliberations (*K. Forney/E. Oleson presentation*)
  - Team member feedback on essential short-term and longer-term needs for the TRT (information, data, analyses). Focus on identifying critical unknowns and data gaps.

**Break** **10:45 PM****Continued Discussion: Developing TRT Work Plan** **11 AM**

- FKWTRT Meeting Schedule (*20 minutes, CONCUR*)
  - Outline and seek feedback on planned schedule, locations and topics
- Work Teams (*30 minutes, CONCUR/PIRO*)
  - General discussion on use of work teams, as well as a more focused conversation – based on Team deliberations thus far – regarding immediate Work Team needs. Also consider outreach needs.
  - Also can and should include discussion of TRP drafting and process. To what extent is it good/helpful to have Team members engaged in the drafting process? What’s the timeline and steps for developing a draft TRP?
- Team Web Site (*10 minutes, CONCUR/PIRO*)
  - Information available
  - How best to use to support Team deliberations
- Next Steps (*15 minutes, CONCUR/PIRO*)

**Public Comments** **12:15 PM****Adjourn** **12:30 PM**

## ATTACHMENT 2

### **False Killer Whale Take Reduction Team (FKWTRT) Meeting #1, February 17-19, 2010 Honolulu, Hawaii**

#### Meeting Materials

#### **1) General Meeting Information**

- a. Provisional Meeting Agenda
- b. Team Member and Alternate List
- c. Proposed Ground Rules
- d. CONCUR Introduction
- e. CONCUR Stakeholder Assessment Report (Interviews Summary) (*to be provided at meeting*)

#### **2) Process Overview**

- a. Federal Register notice establishing the FKWTRT (75 FR 2853, January 19, 2010)
- b. Frequently Asked Questions about the False Killer Whale Take Reduction Process (*to be provided at meeting*)

#### **3) Background Information**

- a. Draft 2009 Stock Assessment Report (SAR) (*or Final 2009 SAR to be provided at meeting if available*)
- b. Forney, K.A. 2009 Serious injury determinations for cetaceans caught in Hawaii longline fisheries during 1994-2008. Draft document PSRG-2009-09 presented to the Pacific Scientific Review Group, November 3-5, 2009, Del Mar, CA.
- c. Table of Pacific Islands Region Cetacean Mortalities and Serious Injuries and Potential Biological Removal Levels (PBR)
- d. Revisions to Guidelines for Assessing Marine Mammal Stocks (GAMMS II)
- e. Differentiating Serious and Non-Serious Injury of Marine Mammals: Report of the Serious Injury Technical Workshop, 10-13 September 2007, Seattle, Washington.
- f. 90-Day Finding on a Petition to List the Insular Population of Hawaiian False Killer Whales as an Endangered Species (75 FR 316, January 5, 2010)

#### **4) Selected Scientific Literature on False Killer Whales**

- a. Baird, R.W. 2009. A review of false killer whales in Hawaiian waters: biology, status, and risk factors. Report prepared for the U.S. Marine Mammal Commission under Order Number E40475499, December 23, 2009, 41 pp.
- b. Baird, R.W., A.M. Gorgone, D.J. McSweeney, D.L. Webster, D.R. Salden, M.H. Deakos, A.D. Ligon, G.S. Schorr, J. Barlow, and S.D. Mahaffy. 2008. False killer whale (*Pseudorca crassidens*) around the main Hawaiian Islands: Long-term site fidelity, inter-island movements, and association patterns. *Marine Mammal Science* 24(3): 591-612.
- c. Madsen, P.T., I. Kerr, and R. Payne. 2004. Echolocation clicks of two free-ranging, oceanic delphinids with different food preferences: false killer whales (*Pseudorca*

*crassidens*) and Risso's dolphins (*Grampus griseus*). *Journal of the Acoustical Society of America* 207: 1811-1823.

- d. Yuen, M.M.L., P.E. Nachtigall, M. Breese, and A.Ya. Supin. 2005. Behavioral and auditory evoked potential audiograms of a false killer whale (*Pseudorca crassidens*). *Journal of the Acoustical Society of America* 118(4): 2688-2695.
- e. Reference list of additional false killer whale bioacoustics papers

## 5) Longline Fishery Information

- a. Overview/Description
  - i. Swenarton, T. and S. Beverly. 2004. Documentation and classification of fishing gear and technology on board pelagic longline vessels: Hawaii module. Working Paper for the 17<sup>th</sup> Meeting of the Standing Committee on Tuna and Billfish, Majuro, Marshall Islands, 9-18 August 2004, INF-FTWG-2, 17 pp.
  - ii. Pooley, S. 1993. Hawaii's Marine Fisheries: Some History, Long-term Trends, and Recent Developments. *Marine Fisheries Review* 55(2): 7-19.
  - iii. Boggs, C.H. and R.Y. Ito. 1993. Hawaii's Pelagic Fisheries. *Marine Fisheries Review* 55(2): 69-82.
  - iv. Pacific Pelagic Fisheries Overview – Western Pacific Regional Fisheries Management Council, <http://wpcouncil.org/pelagic-fisheriestoday.html>
- b. Regulations
  - i. Summary of Hawaii Longline Fishing Regulations – January 28, 2010
  - ii. Seabird Compliance Guide – October 2009
  - iii. Sea Turtle Compliance Guide – October 2009
  - iv. Protected species placards for longline fishing vessels in the Pacific Islands Region
- c. Landings
  - i. Pacific Islands Fisheries Science Center. 2009. The Hawaii-based Longline Logbook Summary Report: January–December 2008. PIFSC Data Report DR-09-004, 15 pp.
- d. Sociocultural Assessments
  - i. Allen, S. and A. Gough. 2007. Hawaii Longline Fishermen's Experiences with the Observer Program. NOAA Tech. Memo. NMFS-PIFSC-8, 47 pp.
  - ii. Reference list of additional sociocultural assessments

## 6) Observer Reports

- a. 1994-2001 Annual Reports - HI Longline
- b. 2002-2009 Annual Reports - HI Longline Deep-set
- c. 2004-2009 Annual Reports - HI Longline Shallow-set
- d. Representative Marine Mammal Biological Data Forms

## 7) Search for Solutions: Lessons Learned

- a. Atlantic Pelagic Longline Take Reduction Plan
  - i. Atlantic Pelagic Longline Take Reduction Team's recommended Draft Take Reduction Plan
  - ii. Final Rule implementing the Take Reduction Plan
- b. Summary of existing measures from other Take Reduction Plans (*to be provided at meeting*)

- c. The Western Pacific Regional Fishery Management Council's Marine Mammal Advisory Committee (MMAC)
  - i. Recommendations from the MMAC
  - ii. Table of possible mitigation measures developed by PIRO for the MMAC in 2007
- d. Reports from Workshops Addressing the Depredation Issue
  - i. Report of the Workshop on Interactions between cetaceans and longline fisheries, 11-15 November 2002, Apia, Samoa
  - ii. Relevant abstracts and workshop summaries from the Vancouver Aquarium's Symposium on Fisheries Depredation by Killer and Sperm Whales (Behavioural Insights, Behavioural Solutions), October 2-5, 2006, British Columbia, Canada
  - iii. Report of the Workshop on the Depredation in the Tuna Longline Fisheries in the Indian Ocean, 9-10 July 2007, Victoria, Seychelles
- e. Acoustic Research on Depredation
  - i. Mooney, T.A., A.F. Pacini, and P.E. Nachtigall. 2009. False killer whale (*Pseudorca crassidens*) echolocation and acoustic disruption: implications for longline bycatch and depredation. *Canadian Journal of Zoology* 87: 726-733.
  - ii. Thode, A., J. Straley, C.O. Tiemann, K. Folkert, and V. O'Connell. 2007. Observations of potential acoustic cues that attract sperm whales to longline fishing in the Gulf of Alaska. *Journal of the Acoustical Society of America* 122(2): 1265-1277.
  - iii. McPherson, G., P. Turner, C. McPherson, and D. Cato. 2003. Testing of acoustic tracking system for toothed whales around longline and gillnet fishing gear, and preliminary trials of depredation mitigation devices for longline fisheries. Project Report (R02/0923). Report to Eastern Tuna Management Advisory Committee, Southern and Western Tuna and Billfish Management Advisory Committee and Australian Fisheries Management Authority, 37 pp.
- f. Moreno, C.A., R. Castro, L.J. Mújica, and P. Reyes. 2008. Significant conservation benefits obtained from the use of a new fishing gear in the Chilean Patagonian toothfish fishery. *CCAMLR Science* 15: 79-91.
- g. Other Relevant Information
  - i. TEC, Inc. 2009. Cetacean depredation in the Hawaii longline fishery: Interviews of longline vessel owners and captains. Report for NOAA NMFS Pacific Islands Regional Office, 34 pp.
  - ii. Reference list of additional relevant papers on bycatch and depredation

## **ATTACHMENT 3**

### **False Killer Whale Take Reduction Team FINAL GROUND RULES**

*(Ratified unanimously at February 17-19, 2010, False Killer Whale Take Reduction Team kick-off meeting.)*

The following ground rules have been informed by CONCUR's professional experience, discussions with NOAA Fisheries, directives in the Marine Mammal Protection Act, and confidential interviews conducted with the primary Take Reduction Team (TRT) members. These ground rules are intended to foster and reinforce constructive interaction and deliberation among TRT members. They emphasize clear communication, respect for divergent views, creative thinking, collaborative problem solving, trust building, working towards consensus, and the pursuit of mutual gains. The TRT may decide to reconsider and revise these ground rules if they appear not to be serving the TRT process.

1. **Membership:** TRT members have been invited to serve by NOAA. TRT members were selected based on professional expertise or experience in the areas of conservation or biology of marine mammal species or fishing practices which result in the incidental mortality and serious injuries of such species. TRT members were also selected for their diversity of interests, geographic location, communication network, capability to work with diverse viewpoints, and commitment to developing a consensus-based Take Reduction Plan in the prescribed timeframe. Membership reflects a balance by interest, region, and sector.

TRT members have also been recruited based upon their ability to ably represent the views of an important constituency. TRT members should work to keep their constituencies informed of the TRT's efforts and to reporting relevant feedback to the TRT. In reporting back, TRT members will strive to integrate the views of their constituency rather than resorting to a "lowest common denominator" portrayal.

2. **Alternates:** Primary TRT members will make every effort to attend all TRT meetings. For those members unable to attend a meeting due to scheduling conflicts, a designated alternate is invited to attend and speak on behalf of the member. Each team member may have one alternate. Names of candidate alternates are to be submitted at least one month in advance of the next meeting for approval by NMFS. Alternates should represent the same organization or constituency as the primary representative, be knowledgeable and able spokespersons, and be committed to work collaboratively towards a consensus agreement. (Note: If an alternate has already been formally appointed by NMFS, there is no need to reconfirm approval.)

A Team member who needs to send an alternate is requested to notify NMFS at least two weeks in advance that the approved alternate will attend for them. Primary TRT members will work with their alternates to ensure that they are up to speed on TRT deliberations. This will enable alternates to step in effectively and keep the project from "backsliding." If neither the member nor alternate can participate, another individual is welcome to attend the meeting as an observer.

3. Collaboration. Below are a series of ground rules intended to foster collaborative, effective and respectful Team deliberations.
  - **Active, focused participation.** Every participant is responsible for communicating his/her perspectives. Everyone is encouraged to participate; no one dominates. Only one person will speak at a time and only after being recognized by the facilitation team (CONCUR). Everyone will help stay on track.
  - **Respectful interaction.** Participants will respect each other's personal integrity, values and legitimacy of interests. Participants will assist each other in creating an effective atmosphere by: using microphones; turning off cell phones; refraining from sidebar conversations; and using computers for TRT-related work only.
  - **Integration and creative thinking.** Participants will strive to be open-minded and integrate members' ideas and interests. Participants will attempt to reframe contentious issues and offer creative solutions in a timely fashion to enable constructive dialogue.
  - **Adherence to ground rules.** As a set of mutual obligations, TRT members will commit to adhere to these ground rules once they are adopted. TRT members are encouraged to help uphold and enforce these ground rules.
  - **Negotiating in good faith.** In their formal capacity as TRT members, appointees are asked to negotiate in good faith at and between TRT meetings. Nothing in these Ground Rules limits Team members' abilities to take action in other fora. However, Team members are asked to be mindful of how their actions elsewhere will likely impact the collaborative process and the Team's collective efforts to reach consensus.
4. Meeting Materials: NMFS staff and CONCUR commit to provide, to the extent practicable, all primary meeting materials at least two weeks ahead of time in order to give TRT members ample time to review the relevant information. All TRT members will have equal access to meeting materials. Members are expected to review meeting materials beforehand to foster informed deliberations. Members also are asked to bring their binders to each TRT meeting.
5. Information Sharing: TRT members recognize that the False Killer Whale TRT project depends on using the best readily available information. TRT members commit to identify information needs in a timely fashion and to contribute in framing needs for additional research and analysis. TRT members commit to share, and not withhold, relevant information. Likewise, NMFS will strive to share information to the greatest extent possible consistent with existing legal and regulatory constraints. Preliminary information will be treated as such. Analyses will be presented in a manner that distinguishes interpretation and inference from underlying data.
6. Meeting Participation. Meeting deliberations are focused among TRT members only. Members of the public are invited to participate at set times during the meetings. As appropriate, NMFS may invite comment from designated liaisons to the non-English-speaking elements of the longline fleet in order to foster effective outreach efforts. Also, as needed, the convenors or

facilitators may ask NMFS staff and other experts in attendance to fold in relevant expertise and information.

7. Multi-interest Work Teams and Interest Group Caucusing: NOAA Fisheries staff and CONCUR expect that cross-interest group work teams may be an important way to develop constructive, integrative work products during and between TRT meetings. The aim of such work teams is to encourage multi-interest options and work products rather than work products put forward by a single bloc or interest group. It is anticipated that between-meetings work teams will meet by teleconference. As appropriate, opportunities will be provided during TRT meetings for caucusing within and across interest groups.
8. Decision-Making: The False Killer Whale Take Reduction Team (TRT) will seek to develop consensus recommendations where possible. In this context, “consensus” means that the recommendation in question is supported by all TRT members present at the meeting; this does not necessarily mean that each TRT member likes everything about the recommendation, but that each member is willing to accept and support it. Where consensus cannot be reached in the time available, the range of possibilities considered by the TRT will be presented, including the views of both the majority and minority.

In order to assist the Team in building broader consensus and help the Agency understand and characterize the extent of common ground, the facilitators may opt to use straw votes during the process to gauge the extent to which Team members support various items under discussion. Meeting summaries will not attribute votes to specific Team members.

9. Meeting Summaries: The facilitation team will prepare and distribute to Team members Key Outcomes Memoranda (KOM) following each meeting. The KOM will endeavor to summarize key decisions made, issues discussed, and the next steps identified. It will not serve as a meeting transcript nor will it typically attribute comments or suggestions to specific individuals. As well, to the extent the Team relies on straw votes, the KOM will not record each Team members’ vote. In general, the KOM will characterize the extent of consensus reached on important management options. In such instances, the summary will make clear the degree of consensus across various groups and not just present a straight numeric tally.

In the event TRT members believe the KOM significantly misrepresents particular decisions, issues, or next steps, they are requested to notify the project facilitators or convenors in a timely fashion. The project facilitators or convenors will review the matter and use their professional judgment to determine if revisions are needed. If so, they will prepare a revised KOM and distribute it in a timely fashion to all TRT members.

10. TRT Communication Protocols: TRT members wishing to send email correspondence or documents to the full TRT are asked to send these through the facilitation team or convenor. To the extent TRT members email documents to their constituents to elicit feedback, Team members are asked to make clear that the materials are being provided to support Team deliberations and not targeted for general distribution.

11. Media Contact: The Team recognizes that members may be contacted by press during the course of the Team's deliberations. To the extent Team members are contacted, we agree to the following:

- TRT members agree not to attribute particular comments to particular individuals, nor to characterize others' views;
- TRT members agree not to portray ideas as consensus before the TRT has explicitly agreed on them;
- TRT members inform PIRO when False Killer Whale Team and/or issues appear to be the primary focus of the media contact

12. Project Website: NMFS Office of Protected Resources (OPR) will prepare a password-protected website to support Team deliberations. This website is intended to facilitate the sharing of draft or interim work products by the TRT. Similar to the discussion under the Communication Protocols ground rule, to the extent TRT members wish to provide others affiliated with their organization access to the password-protected website in order to foster broader input, Team members are asked to make clear that the materials on the website are being provided to support Team deliberations and not targeted for general distribution. Additionally, NMFS OPR and PIRO have established public web pages that will serve as repositories of and links to agendas, KOM and other meeting materials.

13. Role of Facilitation Team. The facilitation team is non-partisan and will not act as an advocate for particular outcomes. CONCUR will strive to enforce the ground rules in a consistent, fair and firm manner and ensure that the meeting stays on track. CONCUR will keep a list of those waiting to speak, but may opt to take speakers out of turn to foster focused discussions on a particular topic. The facilitation team may, at its discretion, call for breaks to refine meeting strategies to foster effective TRT deliberations. The facilitators may also recommend the use of within- and across-interests, small-group breakout sessions.

In addition to drafting the Key Outcomes memoranda, the facilitation team will serve as the primary secretariat in assisting parties to develop the draft Take Reduction Plan. The Take Reduction Plan will be subject to detailed review and approval by all TRT members.

14. Public Comment: Members of the public may provide comment at designated times on the meeting agenda.