

FIXED GEAR FISHERIES AND WHALES – SEEKING HARMONY



Pacific States Marine Fisheries
Commission Meeting, Boise ID
August 20, 2018

<http://www.opc.ca.gov/whale-entanglement-working-group/>

Entanglements Not A Fluke

2018 Summary* (27/33)

- **22 confirmed entangled whales, 25 total reports**
- Gray whales: 11 confirmed, 13 total
- Humpback whales: 10 confirmed, 10 total
- Fin whale: 1 confirmed, 1 total
- Unidentified: 0 confirmed, 1 total

- **Confirmed fisheries associated with entanglements: 13 reports**
- Commercial Dungeness crab: 9 total
- 4 WDFW (3 gray whales, 1 humpback whale)
- 2 ODFW (2 gray whales)
- 1 ODFW & CDFW (1 humpback whale)
- 1 WA + WA tribal (1 humpback whale)
- 1 tag seen, undetermined shape (color consistent with CA and WA)
- Gillnet: 4 (3 gray whales, 1 humpback whale)

- **Reporting location**
- California: 14 confirmed reports, 17 total reports
- Washington: 7 confirmed reports
- Oregon: 1 confirmed reports

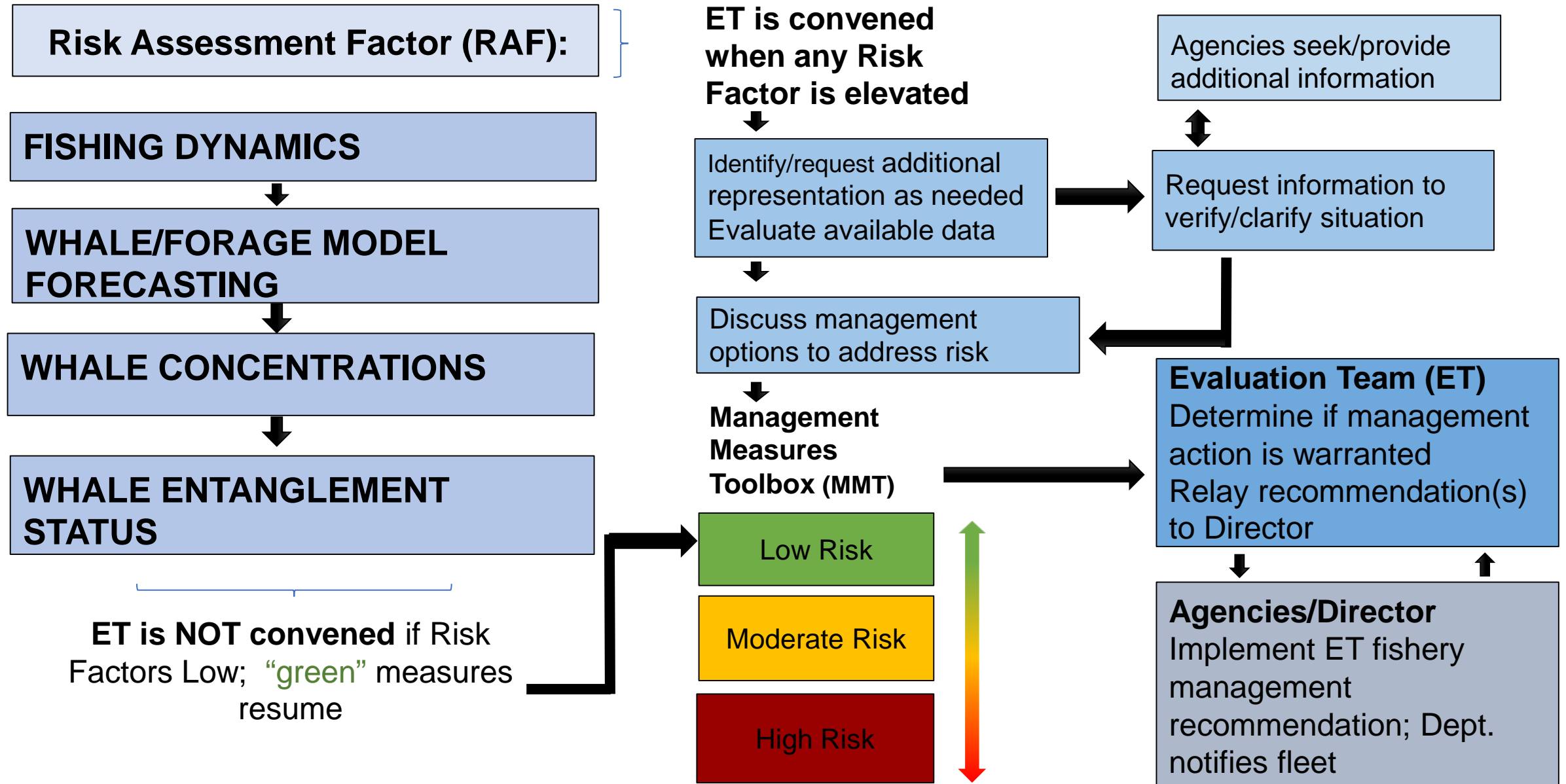
Working Group and Regulatory Update

- Working group developed & piloted risk assessment mitigation program (RAMP) for 2017-18 Dungeness crab season
- Department is currently receiving public comment on proposed surface gear limitation regulations to commercial fishery
- Pending legislation SB1309 proposes:
 - Formalizes Working group and RAMP (Nov. 1, 2020)
 - Amends authority for gear retrieval program for commercial Dungeness crab traps (June 30, 2019)
 - Tasks Department with standardized gear marking on fishery gear (Jan. 1, 2020)

Dungeness Crab Fishing Gear Working Group Updates

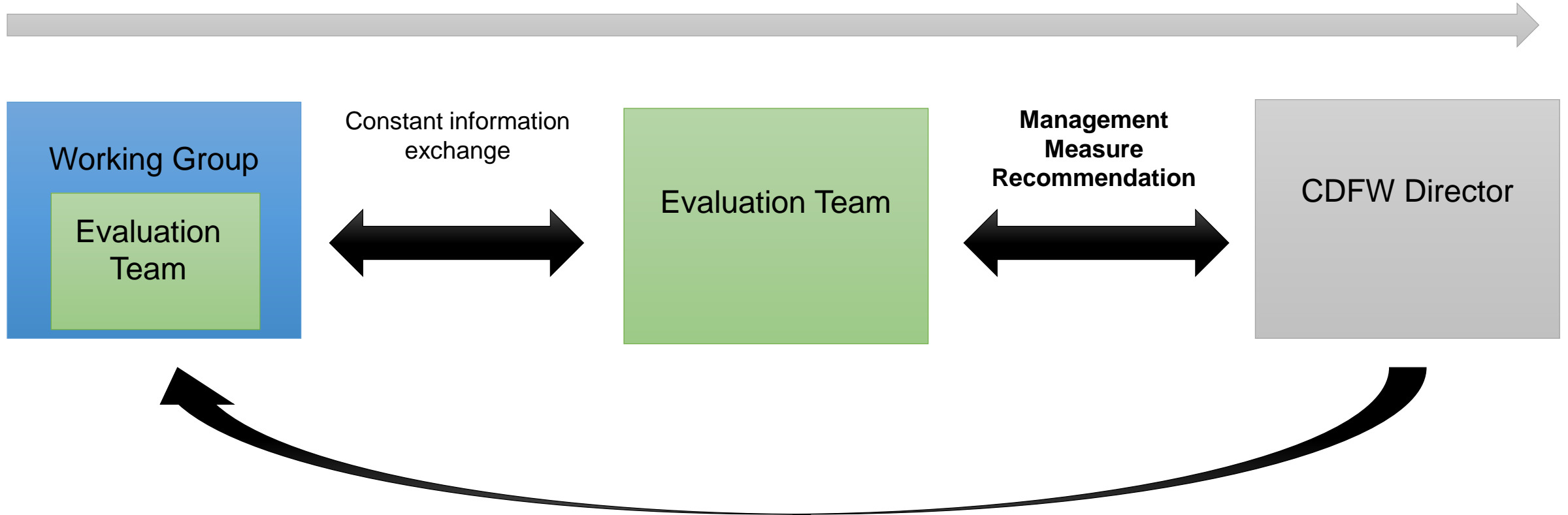
- Developed Risk Assessment Mitigation Program (RAMP):
 - Risk assessment factors (RAF) – Four factors used to identify and assess the level risk of whale entanglements
 - Management measures toolbox (MMT) – suite of measures that adaptively respond to risk
 - Continuing to learn and refine program
- Working Group (WG) Projects projects to inform the RAMP:
 - Solar loggers to monitor fishing effort in space and time
 - Gear modifications (e.g. ropeless gear, manila line, line profile studies, etc.)
 - On-the-water surveillance (e.g aerial surveys, fishermen text threads)
 - Whale/Forage modeling

RAMP PROCESS



RAMP Structure

Ongoing monitoring and information gathering by agencies



RAMP Pilot During 2017-18 Dungeness Crab Season

- WG assesses risk at set time periods (e.g. pre-, mid- and post-season)
- CDFW & NOAA monitor throughout season
- Early-June 2018 – uptick in entanglement reports
 - Initiated an Evaluation Team assessment of risk factors
 - Arrived at “moderate” score for risk factors relating to whales, forage, and entanglement factors
 - Communicate recommendation to commercial fleet: follow BPG, remove inactive gear and all gear by end of season

Department's Proposed Regulations to Limit Surface Gear for Commercial Dungeness Crab Traps:

- Informed by Best Practices Guide
- Limiting number of trailer buoys to 2 buoys
- Limiting length of trailer line by depth

California Dungeness Crab Fishing 2017-18 Best Practices Guide to Minimize Whale Entanglement Risk



Support for Best Practices

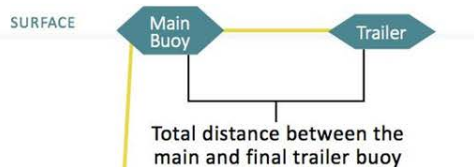
National Marine Fisheries Service (NMFS) has confirmed significant increases in large whale entanglements over the last few years, and specifically in California Dungeness crab fishing gear. This situation threatens the stability of the fishery and coastal fishing communities. In response, a Working Group has developed this Best Practices Guide to highlight voluntary actions believed to be an important step towards reducing whale entanglements.



BEST PRACTICES

- **No excess lines should be floating at the surface.** Floating line should only be between the main buoy and trailer.
- **When changing set location across depths, adjust the length of trap lines** by adjusting shots (i.e., measured length of line) to maintain taut vertical lines.
- **Avoid setting gear in the vicinity of whales** whenever possible.
- **Maintain gear to ensure lines and buoys are in good working condition** and will not break under natural conditions causing gear to become lost or irretrievable. Lost gear contributes to marine debris and increases risk of whale entanglements.
- **All gear should be clearly marked** consistent with applicable regulation. All gear should be maintained so markings are clearly legible to facilitate correct identification of the origins of the gear involved in entanglements.
- **Use the minimum amount of scope** required to compensate for tides, currents and weather. Whales are more likely to become entangled with slack lines, which can potentially create a "floating snare".
- **Remove all fishing gear by the end of the season** when gear is no longer allowed in the water.

BUOY SET-UP BEST PRACTICES



| | |
|--------------------|--|
| RECREATIONAL | shortest as possible, max of 2 fathoms (12ft) at any depth |
| COMMERCIAL | |
| Inside 30 fathoms | shortest as possible, max of 3 fathoms (18ft) |
| 30-50 fathoms | shortest as possible, max of 4 fathoms (24ft) |
| Outside 50 fathoms | shortest as possible, max of 5 fathoms (30ft) |

Minimize # of buoys in set up—no more than 1 trailer buoy inside 30 fathoms

Keep line between trap and main buoy running vertical and taut



1 fathom = 6 feet

Excess Slack Surface Line and Whale Entanglements

Ocean users, including members of the fishing community, are seeing a shift in fishing practices towards increased surface line and the use of multiple surface buoys. During a review of documented entanglements from recent years, fishermen, disentanglement responders, and others see a potential connection between slack surface line and the number of trailer buoys contributing to whale entanglements.

Efforts to evaluate the effectiveness of these voluntary recommendations in reducing the risk of whale entanglements will be made to inform future recommendations and/or management action. These best practices, together with investigating the co-occurrence (or overlap) between whale and fishing effort, are steps the Working Group is taking to address this challenging and complex issue.

For more information about the California Dungeness Crab Fishing Gear Working Group, including a fact sheet, background materials, meeting summaries, recommendations memos, and key resources like this Best Practices Guide, visit opc.ca.gov/whale-entanglement-working-group.

Taking these important, proactive steps to voluntarily reduce slack surface line will help to provide continued opportunities to harvest crab and maintain the fleet's access to the resource.



Reporting Entangled Whales

Report entangled whales IMMEDIATELY to the NMFS whale entanglement response hotline at 1-877-SOS-WHALE (1-877-767-9425) or hail the U.S. Coast Guard on Channel 16. If possible, stand by for responders.

Photographing Entangled Whales (>100 yards away)

WHALE: side view of dorsal fin (or hump); flukes (especially if underside is raised); head; any part of the body where gear may be present.

ENTANGLEMENT: buoy(s); tags; lines on the body; trailing lines (including distance from whale); netting (if present); other gear if present.

Respond Promptly if Contacted by NMFS or CDFW

If you are contacted by NMFS, California Department of Fish and Wildlife (CDFW), or any other government agency regarding a whale entangled in your gear please respond and provide as much information as possible about your fishing gear and practices. Gaining a better understanding of where, when, and how entanglements are occurring is essential in working to prevent entanglements in the future.

If you have suggestions for reducing entanglements in fishing gear, contact Dan Lawson, NMFS Protected Resources Division, at Dan.Lawson@noaa.gov or 562-980-3209.

The Best Practices Guide was developed by the California Dungeness Crab Fishing Gear Working Group.



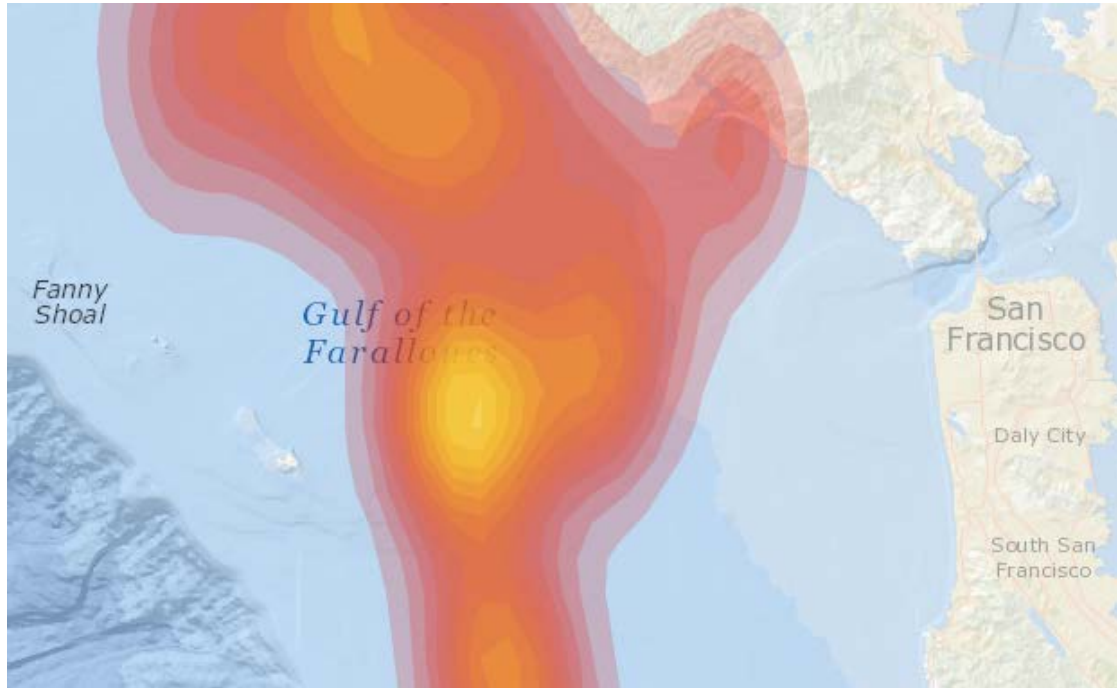
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Working Group Next Steps

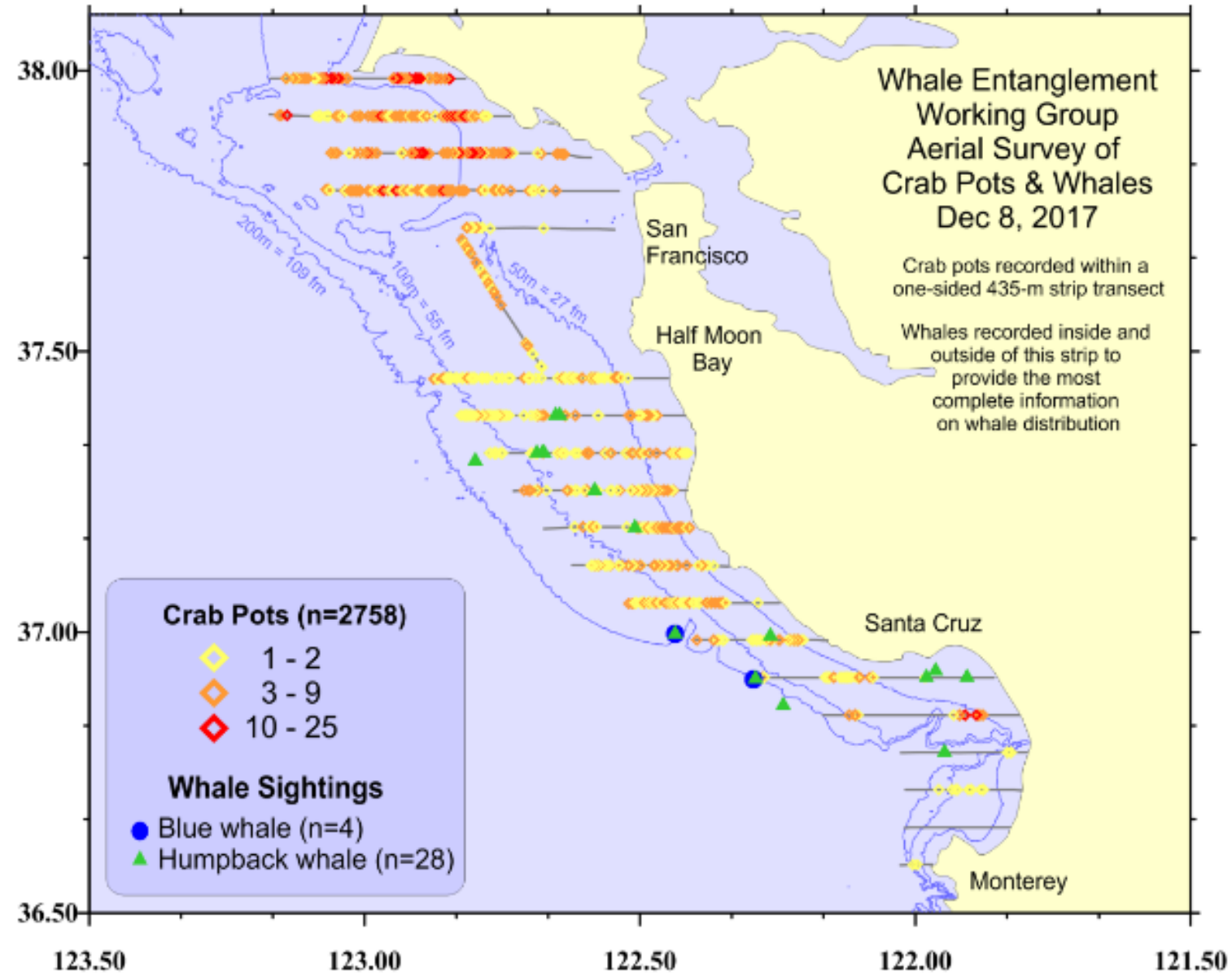
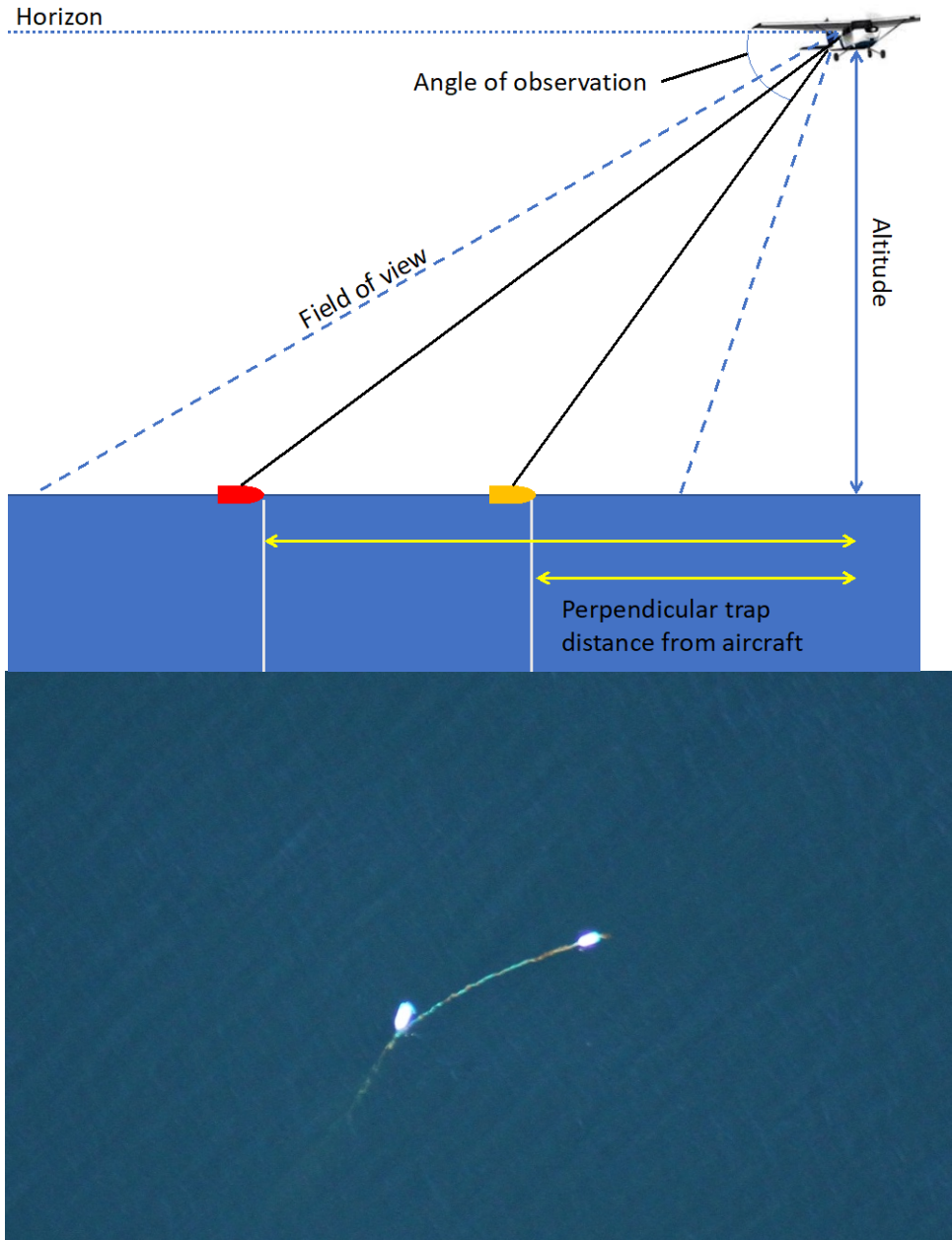
- Continued funding may include budget awarded to OPC by the Legislature to mitigate whale entanglement risk
- WG to refine RAMP in advance of the 2018-19 fishing season
 - Support the Department and NOAA in considering how to include recreational fishery and other fixed-gear fisheries and other at-risk marine species
 - Improve communications with the Dungeness crab fleet
- Department to develop a Title 14 rulemaking package in response to SB 1309
- WG to continue supporting the testing and piloting of new tools to support the RAMP

Working Group Collaborative Projects

Solar Loggers



Systematic Aerial Surveys



Testing Ropeless Gear

