

California Dungeness Crab Fishing Gear Working Group Progress Update on Working Group Activities, March 2017

Administrative Update

In September 2016, the California Dungeness Crab Fishing Gear Working Group developed a series of recommendations and next steps to be implemented during the 2016-17 fishing season in their collective efforts to reduce the risk of whale entanglements in Dungeness crab fishing gear. A recommendations memo was circulated to the Joint Committee on Fisheries and Aquaculture, the Fish and Game Commission, California Department of Fish and Wildlife (CDFW), and the California Dungeness Crab Task Force (DCTF), which is available online:

http://www.opc.ca.gov/webmaster/_media_library/2016/08/Whales_NextStepsMemo_2016.pdf.

The following provides a brief progress update on the status of the Working Group's projects and related activities. The Working Group is committed to taking these important, proactive steps as outlined to reduce the risk of whale entanglements and provide continued opportunities to harvest crab, provide stability, and help ensure ongoing access to the resource. The Working Group looks forward to continuing to keeping resource managers and decision makers informed of the information collected and evaluations conducted during the 2016-17 fishing season to help inform future recommendations to further reduce the risk of whale entanglements off California's coast. Visit

<http://www.opc.ca.gov/whale-entanglement-working-group/> or contact Kelly Sayce, kelly@strategiearth.com or 310-738-2665 for additional information.

Funding Secured to Support Working Group Activities

- In January 2017, the California Ocean Protection Council awarded a \$200,000 grant to The Nature Conservancy (TNC) to support Working Group activities through December 2018. These funds are being leveraged by supplementary funding that TNC has made available to support the administration of the Working Group.
- Additionally, two Bycatch Reduction Engineering Program (BREP) projects that are designed to address priority questions the Working Group is considering were awarded in 2016. Results/outputs from these projects will be made available for the Working Group's review to help inform future recommendations.

Collaborative Research Projects

The Working Group is committed to conducting/supporting the design and implementation of collaborative projects to collect new information to enhance our understanding of whale distribution and fishing dynamics, as well as test/verify gear modifications. All projects outlined below are on-track to submit initial reporting and key findings for the Working Group's review in mid-May.

Enhanced Reporting

- **Surveys:** A series of aerial and vessel surveys are scheduled to take place in Spring 2017 to document the distribution of whales and fishing gear. Surveys are being coordinated in partnership with the Working Group, the National Marine Sanctuaries, Point Blue Conservation Science, and the Southwest Fisheries Science Center.
- **Whale Distribution:** Researchers from the University of California, Santa Cruz and the Southwest Fisheries Science Center will lead a project to organize historical data related to whale behaviour (e.g., existing ocean condition data, prey distribution patterns, whale sightings). Once the information is compiled and an initial review of the data has been completed in mid-May, the Working Group will consider the value of further processing and integrating the information to create maps of existing data relative to historical entanglement patterns and evaluate capabilities to forecast whale distributions.
- **Fishing Dynamics:** Fishing participants on the Working Group are working with CDFW and TNC to conduct a series of pilot tests in mid-April on different types of data loggers (e.g., GPS systems, solar plotters, streamlined logbook, TNC's eCatch). CDFW and TNC are leading the development of the pilot methodology, with the goal to gain a more comprehensive understanding of useful mechanisms to collect fishing effort data based on feasibility, costs, quality of data, etc.

Gear Modification Testing

- A federally funded BREP project is underway to evaluate the line profiles and load strengths of different types of fishing line. Additionally, the project will evaluate the visual contrast of different line types/colors while in the water column. Fishermen participants on the Working Group are assisting with the implementation of this project which began in March 2017.
- Initial reporting will be shared during “Crab Gear Innovations” workshop hosted by the Pacific States Marine Fisheries Commission on March 29-30 in Portland. An interim project report will be delivered to the Working Group during its next in-person meeting in May 2017.

Communications and Outreach

The Working Group is committed to developing appropriate and effective communications materials and actively conducting outreach activities to promote awareness about the issue of whale entanglements.

2016-17 Best Fishing Practices & Related Communications

- The Working Group developed a number of voluntary “best practices” focused on surface gear (e.g., buoy setup, excessive (slack) surface line, number of trailer buoys) to be implemented during the 2016-17 fishing season.
- An informational flyer was developed and shared at fishing association and membership meetings prior to the start of the season, and also distributed to local gear stores and posted by Working Group fishing participants at ports/harbors from Crescent City to Morro Bay. Additionally, CDFW Enforcement and the United States Coast Guard have distributed copies of the flyer to help educate and inform recreational users, and the California Recreational Fishing Survey (CRFS) surveyors also circulated copies of the flyer during regular engagement with the recreational fishing community.
- The “2016-17 Best Practices Guide” is available online at:
http://www.opc.ca.gov/webmaster/media_library/2016/08/Best_Practices_Guide_Final.pdf

NOAA Disentanglement Trainings

- Beginning in Spring 2017, the National Marine Fisheries Service (NMFS), in partnership with California Whale Rescue and TNC, will train commercial and recreational fishermen become first responders to entangled whales. This will complement fishermen-focused trainings conducted in 2015 and 2016.

Additional Efforts

The Working Group also identified other items that could benefit from some level of exploration and/or action during the 2016-17 fishing season:

Gear Markings: Double-sided Trap Tags

- To help better identify the type of gear on entangled whales, the Working Group recommended the Dungeness crab industry consider the benefits printing permit holder information on both sides of the CDFW-issued trap tags.
- During the DCTF’s October 2016 meeting, the DCTF made a formal recommendation to CDFW’s License and Revenue Branch to print the tags on both sides for one trap tag cycle (2 years). This increased cost of approximately \$70,000 over a two-year period will be paid through the Dungeness Crab Account. Additional details are available via the DCTF’s January 2017 legislatively mandated report:
http://www.opc.ca.gov/webmaster/ftp/project_pages/dctf/DCTF-Leg-Report-Jan-2017.pdf.

Lost Fishing Gear Recovery Program

- The Working Group continues to support CDFW’s efforts to establish a statewide lost fishing gear recovery program as outlined in the Whale Protection and Crab Gear Retrieval Act, SB 1287. Working Group participants are actively involved in informing an initial suite of options that CDFW has developed for consideration:
http://www.opc.ca.gov/webmaster/ftp/project_pages/dctf/ec-meeting-19/EC_DCTF_Model_Eval_Gear_Retrieval_Program_February_2017.pdf.