The purpose of this meeting summary is to:

- Provide a high-level summary of discussions and outcomes from the October 27-28, 2021 DCTF meeting that took place online via Zoom; and
- Inform DCTF Members and the general public of the ongoing work of the DCTF.

A meeting voice recording is also available for 30 days following the meeting and can be obtained by emailing info@dungenesscrabtaskforce.com.

DCTF MEMBER ATTENDEES

John Barnett, San Francisco, Upper Production Level
Scott Bertelsen, Bodega Bay, Lower Production Level
Bill Blue, South of Half Moon Bay, Upper Production Level
George Bradshaw, Crescent City, Production Level Not Specified*
Anthony Caito, Caito Fisheries, Processor
Tony Cannia, Fort Bragg, Lower Production Level
Mark Capra, Coastside Fishing Club, Sport Fishing
Mike Cunningham, Eureka, Upper Production Level
Vince Doyle, Fort Bragg, Upper Production Level
David Haddad, Crescent City, Lower Production Level
Tom Hart, South of Half Moon Bay, Lower Production Level
David Helliwell, Alternate for Harrison Ibach, Eureka, Lower Production Level (end of Day 2)
Scott Hockett, Noyo Fish Company, Processor (absent on Day 1; Present on Day 2)
Jenn Humberstone, Alternate for Kate Kauer, The Nature Conservancy, Nongovernmental Organization
Harrison Ibach, Eureka, Lower Production Level
Christy Juhasz, CA Dept. of Fish & Wildlife
Nick Kreiger, Alternate for Larry Collins, San Francisco, Lower Production Level
Porter McHenry, Alternate for Geoff Bettencourt, Half Moon Bay, Upper Production Level
Matthew O'Donnell, Nonresident, Production Level Not Specified*
Dick Ogg, Bodega Bay, Upper Production Level
Rick Powers, Commercial Passenger Fishing Vessel
Zach Rotwein, Trinidad, Production Level Not Specified*
Randy Smith, Alternate for Gerry Hemmingsen, Crescent City, Upper Production Level
Asst Chief Mike Stefanak, CA Dept. of Fish & Wildlife
Ross Taylor, Humboldt Area Saltwater Anglers, Sport Fishing (Day 2)
Joe Tyburczy, California Sea Grant

*Not-specified production level seats represent both the lower and upper production levels.

ABSENT

Jim Anderson, Half Moon Bay, Lower Production Level
Vacant seat, Nongovernmental Organization

1 The meeting is recorded (via Zoom) and will be erased after 30 days in accordance with the Bagley-Keene Open Meetings Act.
CA DEPARTMENT OF FISH AND WILDLIFE
Joanna Grebel, CA Dept. of Fish & Wildlife
Cpt. Eric Kord, CA Dept. of Fish & Wildlife
Sonke Mastrup, CA Dept. of Fish & Wildlife

OTHER
Noah Oppenheim, Liaison to the Joint Committee on Fisheries and Aquaculture

DCTF ADMINISTRATIVE TEAM PRESENT
Rachelle Fisher, Strategic Earth Consulting
Carolyn Kraft, Strategic Earth Consulting
Kelly Sayce, Strategic Earth Consulting
Noah Ben-Aderet, Ocean Protection Council

1. Welcome, introductions, agenda review

The Admin Team walked through the agenda, meeting agreements, and voting procedures. Procedures for public comment were also reviewed.

2. Public comment on non-agenda items

- Dr. Carrie Pomeroy, Institute of Marine Sciences, UC Santa Cruz, provided an update on the research she is doing in partnership with Dr. Joe Tyburczy, Dr. Carrie Culver, Dr. Pete Nelson, and Brianna Haugen. With support from 2015-16 Crab Fisheries Disaster Relief funds, they are researching how management measures impact the Dungeness and Rock crab fisheries, including the supply chain. In the next couple of months, Brianna and Dr. Pomeroy will be traveling to various ports along the California coast to introduce themselves and conduct interviews with fishermen. Please contact Dr. Pomeroy if you have any questions at cpomeroy@ucsc.edu or 831-359-6670.

- Ed Tavasieff, commercial fisherman, asked the DCTF to consider a requirement to set and pull gear on a daily basis (e.g., pull in all gear overnight) as a tool to reduce the amount of gear and vertical lines in the water and reduce marine life entanglements. This requirement could be implemented at the beginning or tail end of the season when whales are present.

3. Review and confirm updated Charter and draft 2021-23 DCTF Work Plan administration and operations.

The DCTF Charter was updated to reflect membership and voting changes. The Admin Team reviewed the changes which included:

- New processor appointments: Scott Hockett, Noyo Fish Company, and Anthony Caito, Caito Fisheries, were added to the charter.
- Vacancies: The vacant nongovernmental seat remains open until filled.
- Voting: All references to the voting structure were updated to reflect changes mandated by Senate Bill 80 (SB 80) (i.e. an affirmative of ⅔ of the DCTF (a total of 14 votes) is required to forward a recommendation).

The DCTF Work Plan provides a road map for how the DCTF will address priority topics. The document was updated to reflect new priorities that will be the focus of DCTF discussions from November 1, 2021 through June 30, 2023. The updates to the Work Plan are intended to allow greater flexibility and accommodate new priorities that arise during the next two years. The DCTF discussed the amendments suggested by the Admin Team and identified additional modifications:

Two DCTF Members requested as a high priority that the DCTF inform changes to California’s Risk Assessment and Mitigation Program’s (RAMP) impact scoring for unknown entanglements. Both expressed concern that the Dungeness crab fishery is being penalized for entanglements in unknown fishing gear. A DCTF Member requested that reviewing future iterations of the RAMP also be added to RAMP-related priorities.

Public comment was taken on the topic at hand.

- No public comment was received.
Administrative Vote: Consideration and possible adoption of updated Charter and 2021-23 DCTF Work Plan.

APPROVED: The DCTF adopts the 2021 DCTF Charter and 2021-23 DCTF Work Plan with suggested edits to the Work Plan including adding discussing future iterations of the RAMP and informing unknown gear impact scoring for entanglements as outlined in the RAMP. The priorities in the Work Plan may continue to be updated and informed by Executive Committee guidance.

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Note: Roll call is not taken for administrative votes.

4. Receive updates and discuss California commercial Dungeness crab fishery topics including, but not limited to, the Dungeness crab account, California’s preseason quality and domoic acid testing, 2020-21 season landings, bi-weekly reporting requirements, Senate Bill 80 and timing for new Dungeness Crab fishery regulations, progress on previous DCTF recommendations, etc.

Updates
Christy Juhasz, California Department Wildlife (CDFW) Marine Region and DCTF Member, gave a presentation to provide updates on various aspects of the California Dungeness crab fishery. Asst Chief Mike Stefanik, CDFW Law Enforcement Division (LED) and DCTF Member, provided high-level updates on the status of the accounting of the Dungeness Crab Account (Fish and Game Code (FGC) §8276.5) stating that the most recent accounting is from the 2018-19 FY, which was shared during the October 2020 DCTF meeting. LED hopes to have an updated accounting to share for the 2019-20 FY by the end of 2021. They confirmed that CDFW is spending the full $740,000/year spending authority provided by the Legislature on management of the Commercial Dungeness Crab Trap Tag Program (i.e., law enforcement, a full team of Environmental Scientists, purchase and mailing of buoy tags, etc.) and the administration/facilitation of the DCTF.

DCTF Members discussed elements of the presentation and updates:

In-Season Waivers
During the March 2021 DCTF meeting, the DCTF provided guidance to LED on how to issue waivers when a permitholder is unable to service their gear (e.g., vessel breakdown, health condition) and needs another permitholder to pull their gear. LED explained that they have issued a few waivers during the 2020-21 season utilizing the DCTF’s guidance on a case-by-case basis. A DCTF Member requested clarification on whether entanglement risk is part of the evaluation for the in-season waiver request. LED confirmed that entanglement risk is part of the evaluation and is assessed on a case-by-case basis when each in-season waiver request is submitted.

Dungeness Crab Account (DCA)
Various DCTF Members expressed concerns about the DCA including the lack of updated accounting information and the dwindling surplus that has been reported in previous reports. To better understand what is happening with the account and its surplus DCTF Members requested CDFW provide an updated accounting of the DCA as mandated by FGC §8276.5, to better inform DCTF discussions on how the surplus can benefit the fleet (e.g., refunds, change the tag, or costs). Some Members expressed frustration that the DCTF’s October 2019 Recommendation for a detailed audit of the account had not been addressed. Other Members did not think a highly detailed audit was needed, but requested CDFW provide updated information on revenue, expenditures, surplus, etc. annually. CDFW noted that they are waiting for more information internally to develop an accounting summary for the 2019-20 FY similar to what was provided in 2019. CDFW explained that they have no plans to spend down the account and use of those funds are bound by their spending authority and the state’s requirement that the DCA maintain a two-year surplus to accommodate cost fluctuations, the cost of replacement tags, and other ongoing expenditures.

Members would like to see the DCA’s surplus (the amount beyond the $1.48M required to stay in the account) be
used to lower fees or be refunded back to the fleet because they are concerned that previously reported funds are being spent by CDFW and the state without transparency and oversight. Noah Oppenheim, Liaison to the Joint Committee on Fisheries and Aquaculture, explained that the statute (FGC §8276.5) and regulations (§132.1 Title 14, CCR) mandate the uses of the DCA account and does not allow a refund to the fleet without a legislative and regulatory change. The statute would allow a reduction in tag costs, but which would require a regulatory change through a CDFW rulemaking package.

The DCTF debated the pros and cons of recommending a refund or change in fees without a recent DCA summary available. The DCTF requested that the annual DCA summary be presented at the DCTF Annual Meeting for the DCTF review as they have done since its inception.

The DCTF took two straw polls to assess the level of agreement on whether the DCTF supports making a recommendation regarding the DCA.

Straw Poll: The DCTF requests the annual DCA accounting from CDFW/LED at the annual DCTF meeting including detail on how much money is in the DCA beyond the required two-year reserve (incl. future projections). If there is a surplus beyond the required reserve, the DCTF recommends CDFW reduce the costs of trap tags and/or biennial permit fees - or return money to permitholders while being reflective of the amount needed to sustain the program without a surplus. (8 up, 9 sideways, 2 down, 0 abstain) - Pass

Straw Poll: The DCTF requests the annual DCA accounting from CDFW/LED at the annual DCTF meeting including detail on how much money is in the DCA beyond the required two-year reserve (incl. future projections). The DCTF recommends CDFW implement FGC section 8276.5 (a)(6) - which states “The department shall annually provide an accounting of all costs associated with the crab trap limit program. The department shall use excess funds collected to reduce the cost of the crab trap limit permit fee or tag fee in subsequent years of the program.” Accounting at annual DCTF meeting (19 up, 0 sideways, 0 down, 0 abstain) - Pass

Since the second vote had more support, the DCTF agreed to focus their final recommendation on the latter.

Public comment was taken on the topic at hand.

- Ed Tavasieff, commercial fisherman, asked whether funding is available to help the fleet comply with the upcoming electronic monitoring requirements.
  - The Admin Team stated that electronic monitoring will be discussed later today and anticipates funding will be part of the discussion.

**ACTION:** Consideration and possible recommendations related to CDFW updates, which may include, but will not be limited to, requests for information, amendments to Fish and Game Code §8278, or other management measure recommendations.

**APPROVED:** In accordance with FGC §8276.5, the DCTF recommends the CDFW’s Law Enforcement Division provide an annual accounting of the Dungeness Crab Account, preferably during the annual DCTF meeting. The DCTF requests the accounting to clarify how much money is in the account beyond the reserve required by the state of California (i.e., two years of reserve funds) and projections of anticipated future spending and revenue.

Vote of all DCTF Members (ex officio Members abstained):

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Vote of all DCTF Members (ex officio Members abstained; vacant seats not included in tally):

Thumbs up (19): John Barnett, Scott Bertelsen, Bill Blue, George Bradshaw, Anthony Caito, Tony Cannia, Mark Capra, Mike Cunningham, Vince Doyle, David Haddad, Tom Hart, Randy Smith, Harrison Ibach, Nick Kreiger, Porter McHenry, Matt O'Donnell, Dick Ogg, Rick Powers, Zach Rotwein
5. Presentation and discussion on the marine life entanglement issue including, but not limited to, the application of the RAMP for the 2021-22 season, update on Dungeness Crab Fishing Gear Working Group discussions, status of the Conservation Plan, exploration of new management options to mitigate entanglements, industry-led monitoring surveys, etc.

Ryan Bartling, CDFW Marine Region, gave a presentation on several marine life entanglement topics including the California Dungeness Crab Fishing Gear Working Group’s (Working Group) most recent October meeting and risk assessment, the current RAMP impact score, and the status of the Conservation Plan. DCTF Members asked clarifying questions and discussed various aspects of the presentations.

- **Tracking Openers:** DCTF Members discussed that they would like a means to understand the status of all the opening factors (e.g., domoic acid, RAMP, quality) in one place. They explained that it would be helpful to add a graphic on the Whale Safe Fisheries website explaining the status of the current entanglement risk. Sonke Mastrup, CDFW Environmental Program Manager for Invertebrates, explained how complex it is to manage the commercial Dungeness crab fishery and shared an example of a visual to explain the complexity.

- **Risk Assessment:** A DCTF Member asked if it would be possible to re-evaluate the week’s risk assessment in one week due to extreme weather conditions that interfered with data collection. CDFW explained that at a minimum risk assessments can only be done on a bi-weekly basis. Aerial surveys are being planned by CDFW and the National Oceanic and Atmospheric Administration (NOAA) and Cascadia Research is planning to launch vessel surveys to gather more data to inform the next risk assessment.

- **Management Actions:** Various DCTF Members asked for clarification on what could lead to a closure (e.g., the presence of a single leatherback turtle? three Humpback whale entanglements? an impact score close to three?). A DCTF Member asked if statewide closures are necessary and if it’s possible to use less impactful closures based on regions or zones. CDFW stated that the Director will delay opening any fishing zone with a leatherback turtle present. Three marine life entanglements of Humpback whales do not necessarily lead to a closure. An impact score of three based on a cumulative score of confirmed entanglements in Dungeness crab gear (scored .75 or 1 if animal deceased) and unconfirmed entanglements (scored 0.38 or 0.5 if animal deceased) could lead to a potential closure depending on calendar year or fishing season. If the average impact score that includes the current year and previous two years exceeds 2 during the calendar year, the CDFW Director has discretion for appropriate management action taking into account current risk factors. If the impact score reaches three in a single season, too many entanglements have occurred, and a statewide fishing closure must be implemented, as NOAA’s approach for the Incidental Take Permit (ITP) is based on the entire state.

- **Impact Score:** Various DCTF Members asked if it was possible to clarify how the impact score is informed by in-season and out-of-season entanglements, what the current impact score is, how entanglements in other fishing gear are counted, and when a final review of entanglements will be available. CDFW responded that they are working to better clarify how the impact score is tallied in the next iteration of the RAMP and in the draft Conservation Plan. Currently, there is a running three-year average and the fishery is in the first year of that average with an impact score of 1.13. Gear confirmed to be from another fishery does not count towards the Dungeness crab fishery’s impact score. CDFW expects a final review of all entanglements for each year to be completed by the end of each year.

- **Unconfirmed Entanglements:** Various DCTF Members expressed frustration that unknown gear counts towards the impact score and requested clarification on the timing of recent summer entanglements. CDFW stated that a confirmed entanglement in unknown gear was detected on August 1, 2021 off Southern California and a confirmed entanglement in Dungeness crab gear was detected on June 9, 2021 off Mexico. CDFW explained that new buoy requirements for other fisheries should help reduce the number of unconfirmed entanglements, but
suggested that the DCTF could offer help by making recommendations on improved gear marking and/or line marking since each entanglement must be attributed to a fishery for the Incidental Take Permit.

- **Line Marking:** Various DCTF Members discussed the pros and cons of using line marking as a way to further reduce the number of unconfirmed whale entanglements. Some DCTF Members thought it could be beneficial if all fisheries were required to use line marking, while others expressed doubts about the efficacy of line marking without knowing more about the best placement for the marking on ropes to better identify the source of the entanglement. They also are interested in learning more about documented evidence that line marking has helped with identifying entanglement sources in other states. The Admin Team noted that NMFS said line marking could help with identification and potentially reduce the number of unconfirmed entanglements. CDFW added that line marking won’t solve all the challenges associated with identifying entanglements, but could help reduce the number of unknowns and suggested asking whale entanglement experts about line marking placement. A DCTF Member and CDFW suggested having the Working Group look at previous entanglements to help identify where (e.g., the top 3ft marked? closer to the trap?) and how a line should be marked to reduce unknown entanglements.

- **Fishing Zones:** A DCTF Member asked if there could be a potential problem with opening Zones 5 and 6 on schedule for the 2021-22 fishing season while delaying opening in Zones 3 and 4 since whales could travel through Zones 5 and 6 as they migrate. CDFW explained that humpback whales don’t typically travel through Zones 5 and 6 (i.e., don’t migrate in a straight line down the coast) and few people fish in those areas leading to low risk.

- **Reducing Lines:** Various DCTF Members discussed the pros and cons of reducing lines as a management measure. Some DCTF Members liked the idea of reducing lines by 50 percent by keeping the unused tags on the boat for enforcement purposes (i.e., the current rule for implementing a gear reduction) if it allowed fishermen to go fishing at the start of the season while reducing risk. Some DCTF Members expressed concerns about fishing with a line reduction at the start of the season due to financial viability and the threat of a potential whale entanglement, which could lead to a closure. A DCTF Member suggested that a depth restriction would be less risky than a line reduction, while another DCTF Member pointed out that both are necessary to avoid high gear concentrations. CDFW noted that fishermen must accept some level of risk because some whales are always present.

- **Selling crab:** A couple of DCTF Members asked for clarification on whether crabs can be sold after an area is closed. CDFW explained that it is illegal to possess or sell crabs in a closed area and for previous early closure declarations, the CDFW Director has given between two- and four-weeks’ notice before the closure to give fishermen time to pull gear and sell crabs before the area is closed.

- **Longlining / Stringing Gear:** Various DCTF Members discussed the pros and cons of longlining / stringing gear as a way to reduce the number of vertical lines in the water. Some DCTF Members thought it could help reduce lines by 50 percent or more and improve efficiencies in fishing. Other DCTF Members expressed concerns that long-lining would result in a fishing bias toward bigger boats. They also highlighted the potential for overlapping and tangling gear from other vessels, safety risks associated with heavier gear for both fishermen and entangled whales, and limitations related to ocean floor topography. Overall DCTF Members agreed that longlining would have to be tested and discussed further to ensure it’s implemented in a thoughtful and workable manner taking into account incremental implementation and vessel sizes. CDFW added that allowing longlining could require a code change, but a new experimental permit program will allow testing stringing gear after a season closure. CDFW also clarified that if a whale was entangled during the testing process, the entanglement would still count in the RAMP. DCTF Members stated that penalizing fishermen for entanglements while gear testing would disincentivize testing.

Public comment was taken on the topic at hand.
Ed Tavasieff, commercial fisherman, noted that the best market opportunities are Thanksgiving and Christmas. As a creative solution to addressing the entanglement issue, fishermen could soak gear in the daytime only by allowing gear to be placed in the water in the morning and removed from the ocean at night when entanglement risk is high. He suggested this could be a means to allow fishing while minimizing risk. He asked the DCTF to consider the option.

A couple DCTF Members responded that the option presented by Mr. Tavasieff would be very challenging and potentially impossible for those with a lot of gear or limited deck space. Mr. Tavasieff clarified that he understands this option may not work for everyone, but suggested the DCTF consider it as a potential tool in the toolbox.

David Helliwell, commercial fisherman and DCTF Alternate, commented that if a depth restriction is employed when entanglement risk is high, CDFW should also consider tying the use of the management option to a gear restriction to reduce the potential for higher concentrations of gear in certain areas, which could lead to higher entanglement risk.

Dave Kasheta, recreational fisherman and DCTF Alternate, noted that the only management measures in place for the recreational fishery when the RAMP identifies high levels of risk are advisories, delays, and closures. He asked that management tools used in the commercial fishery also be allowed to be applied in the recreational fishery.

CDFW explained that the recreational fishery is different from the commercial fishery and due to those differences, it can be challenging or infeasible to use the same management measure for both fisheries. CDFW added that one of the goals with many of the recent regulatory changes implemented in the recreational fishery is to better determine how many participants there are in the fishery to better understand management options.

Deenie Davis, commercial fishing, noted that if CDFW uses a gear reduction to mitigate entanglement risk, the reduction should be implemented equally across tiers. Implementation of this management measure should consider crew and vessel sizes. She encouraged further discussion on how to implement gear reduction fairly. In response to Mr. Tavasieff’s comments, she does not think daily gear setting and retrieval is a viable option. She explained that it would increase air pollution due to increased vessel use. She stated that the industry should consider pursuing a permit buyback program to reduce the number of lines in the water. She expressed support for stringing gear and noted that it has been done successfully on small boats and any potential issues can be resolved. She requested clarification on whether line marking would make fishing gear more visible to whales.

CDFW explained that line marking could potentially help the Dungeness crab fishery have fewer unconfirmed entanglements that would otherwise be contributed to the impact score. There is currently no research available to suggest that a certain type of line marking would deter whales.

The DCTF reflected on the discussion and identified potential recommendation(s). A straw poll was taken to assess the level of agreement on whether the DCTF supports making a recommendation to reduce the number of unidentified entanglements.

Straw Poll: The DCTF sees value in reducing the number of unidentified entanglements along the west coast. The DCTF recommends the Working Group consider the cost-benefit of line markings for all fixed-gear fisheries, accounting of what would be useful in the line marking (for example, would it be helpful to focus on top 10-15 fathoms of line for more effective in identification), and provide guidance to DCTF for further discussion. (9 up, 7 sideways, 0 down, 3 abstain) - Pass

Based on the straw poll, the DCTF moved forward with a recommendation on line marking.

ACTION: Consideration and possible adoption of recommendations related to marine life entanglements in the Dungeness crab fishery and related management processes.

APPROVED: The DCTF sees value in reducing the number of unidentified entanglements along the west coast. The DCTF recommends the Dungeness Crab Fishing Gear Working Group consider the cost-benefit of line markings for all fixed-gear fisheries, and provide guidance to the DCTF for further direction and discussion (e.g.,
Jonathon Gonzalez, California Coastal Crab Association, shared a presentation on how industry-led vessel-based surveys were piloted in the 2020-21 fishing season to inform the RAMP. He stated that the program no longer has the funding and coordination to continue and requested support from the DCTF to identify long-term funding. DCTF Members asked clarifying questions and discussed various aspects of the presentation:

- **Observers**: Various DCTF Members asked about the role of observers including their purpose, the availability of observers to meet tight weather windows, and the need for trained observers.
  - Mr. Gonzalez and CDFW explained that the goal is to have independent observers stationed on fishing vessels to avoid any issues related to conflict of interest. There are opportunities for observers to participate in existing trips such as sport fishing, whale watching, etc., which would expand the program and also save on costs. CDFW added that they are willing to help build a pool of trained observers to ensure the data can be trusted, but would need funding and vessels to sustain the effort.

- **Non-fishing Vessels**: The DCTF discussed the potential for non-commercial fishing vessels (e.g., recreational fishermen, whale watching vessels) to do the surveys and questioned whether observers could/should be placed on those vessels. A DCTF Member felt it was important for commercial fishermen to do these surveys because of the impacts that could be placed on the fishing industry if the surveys are not conducted or performed properly.

- **Survey Options**: Various DCTF Members asked a number of questions associated with aerial surveys: How do industry-led vessel-based surveys compare to aerial surveys in terms of cost? Will aerial surveys continue in future seasons? Is CDFW still planning to purchase a plane for the Whale Safe Fisheries Program? Is the US Coast Guard available to assist with aerial surveys? Could the pilots that work with NOAA to collect information for West Coast Coastal Pelagic Species (CPS) help gather data towards the RAMP?
  - CDFW stated that aerial surveys will continue in future seasons. A cost comparison is not available at this time. They explained that vessel-based surveys play an important role in ensuring consistent data streams are available to inform the RAMP. Vessel-based surveys are faster to implement, vessels are able to respond quicker, and they can be available at multiple ports. Additionally, aerial surveys are not always available and are more prone to weather related cancellations than vessel-based surveys. CDFW’s effort to purchase a plane for the Whale Safe Fisheries program is ongoing. They explained that a US Coast Guard representative participates on the Working Group and there have been conversations about utilizing US Coast Guard aircraft to support aerial survey efforts. However, the US Coast Guard’s primary goal of search and rescue doesn’t align with the aerial population survey work and takes priority over this during a flight. CDFW said they will talk to CPS about the possibility of assisting with surveys.

  - A DCTF Member asked if US Coast Guard surveys would be useful since they are opportunistic and do not fly established survey transect lines. CDFW explained that species identification could be challenging, but with an observer onboard the information gathered could be helpful.
Funding: Various DCTF Members expressed the importance of collecting data through vessel-based surveys and discussed funding options to address the need. Options included raising sport fees, OPC funding, and using surplus funds in the Dungeness crab account. They stated that any option should ensure that everyone in the Dungeness crab fishery contributes fairly because these surveys benefit the entire fleet. A couple of DCTF Members expressed concerns about having the Dungeness crab fishing industry fund the vessel-based surveys due to the high costs and potential for perceived conflicts of interest. A DCTF Member noted the importance of comparing costs for various surveys and identifying what is most cost effective for the RAMP.

Noah Ben-Aderet OPC responded that staff are working on developing a budget for RAMP and entanglement-related issues for the next two years. He stated that a DCTF recommendation highlighting this topic as a high priority seemed reasonable and the OPC would discuss internally whether there is budget available to support industry-led, vessel-based surveys. Mr. Oppenheim explained that Dungeness crab account funds could not be used to fund these surveys. They can only be used for administering the DCTF, and supporting the commercial Dungeness Crab Trap Limit Program. CDFW further explained that they do not have the funding available to support these surveys.

Public comment was taken on the topic at hand.

Ed Tavasieff, commercial fisherman, asked if sail drones could assist in collecting data and whether a collaborative partnership between fishermen and nongovernmental organizations (NGOs) could provide financial support for vessel surveys.

CDFW responded that drones have been discussed as an option, but there is still capacity needed for an individual to review the video data. Additionally, there have been concerns about resolution quality hampering species identification. Jenn Humberstone, The Nature Conservancy (TNC), responded that TNC paid for surveys that took place during the 2020-21 season, but explained that TNC is not able to provide long-term funding. She stated the organization may be able to donate in-kind support or bridge funding.

Richard James, Marin County resident, expressed support for the surveys to acquire more data and suggested passing the cost onto Dungeness crab consumers.

Vivian Helliwell, commercial fishing, stated that she had submitted a proposal to OPC for a study to inform the entanglement issue, but it didn’t receive funding. She expressed concerns around the transparency of the proposal review process and timeframe for OPC’s review of the proposal.

Mr. Ben-Aderet asked Ms. Helliwell to contact him directly to discuss.

The DCTF generally agreed that industry-led, vessel-based surveys are valuable. They decided not to take a straw poll but to move on to a final recommendation.

**ACTION:** Consideration and possible recommendations related to the implementation of industry-led surveys to inform the RAMP, including, but not limited to, requests for funding, survey design suggestions, etc.

**APPROVED:** During the 2020-21 fishing season, the California Coast Crab Association (CCCA) piloted industry-led, vessel-based surveys to inform the RAMP. The DCTF believes these surveys provided valuable sources of information on marine life concentrations within RAMP Zones especially when no CDFW-approved surveys were conducted to inform risk assessments. The DCTF sees value in continuing these surveys to generate a useful data stream to inform the RAMP and ensure no RAMP Zone is devoid of data.

The DCTF recommends this industry-led program be confirmed as a CDFW-approved data source for use in the RAMP. The DCTF recommends those involved in piloting the surveys (e.g., CCCA, scientists, fishermen, The Nature Conservancy) develop a program budget to outline funding needs to support the program. The DCTF recommends funding be made available by the OPC and/or the exploration of federal grants to fund these surveys in the short-term. The DCTF recommends the Legislature identify long-term funding to support these data
collection efforts into the future.

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Vote of all DCTF Members (ex officio Members abstained; vacant seats not included in tally):
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Thumbs sideways (0)
Thumbs down (0)
Abstain (0)
Absent (2): Jim Anderson, Anthony Caito

6. Presentation from CDFW on electronic monitoring in the commercial Dungeness crab fishery as it relates to the RAMP and other mandates.

Joanna Grebel, CDFW, provided a presentation on updates related to the electronic monitoring requirements outlined in the RAMP regulations (§132.8, Title 14, CCR). DCTF Members asked clarifying questions and discussed aspects of the presentation.

- **Implementation:** A DCTF Member expressed concern that CDFW’s delay in implementing the electronic monitoring requirement would interfere with the ability to use depth restrictions as a management measure under the RAMP.
  - CDFW explained that the mandatory requirement for an electronic monitoring device to be on all Dungeness crab commercial fishing vessels is 2023. However, currently when a depth restriction is applied via the RAMP, any fisherman choosing to fish in the area with a depth restriction must have an electronic device to be able to participate. The DCTF Member asked if plotters qualify as an electronic monitoring device. CDFW confirmed that plotters could be used currently when a depth restriction is employed. However, they may not be a viable tool moving forward since those using data plotters have to send their data to CDFW and CDFW is looking to design an electronic monitoring program that is automated.

- **Funding:** Various DCTF Members expressed concern about the cost of electronic monitoring devices. They stated that the higher the ping-rate, the higher the ongoing costs of the device. They asked if funding was available to help the fleet purchase these tools.
  - CDFW explained the ping rate of one ping per minute was determined based on the utility of the solar logger data pilot. However, CDFW is researching options to lower the ping rate by pairing electronic monitoring devices with buoy sensors. There are opportunities to test equipment at no cost. Interested fishermen should contact Dave Colpo, Pacific States Marine Fisheries Commission (PSMFC) at DColpo@psmf.org. Participants may be able to keep the device used for the testing. OPC added that they provided funding for a solar logger project. Those who participated in the project were provided devices for free and are able to keep them. However, the fishermen will need to pay the annual fees to operate the device at the conclusion of the project. OPC continues to have discussions on how to best assist fishermen with electronic monitoring costs, but there is not a clear plan at this time.
  - A DCTF Member noted that he had received an electronic monitoring device from Mr. Colpo, but there were challenges associated with the speed gear is being pulled and costs related to ping rates. Some DCTF Members expressed concern about the costs of the Pelagic Data Systems devices of $150/device with an annual $300 service fee. They also stated that fishermen are unable to purchase a Pelagic Data Systems solar logger due to COVID supply-chain issues.
Consistency: Various DCTF Members requested that the design of the electronic monitoring program clearly define CDFW’s data needs so fishermen do not have to buy multiple devices that may not be compatible or cost-effective. Some DCTF Members asked if it was possible to use the vessel monitoring system (VMS) that is required to participate in federal fisheries. DCTF Members suggested CDFW work with PSMFC to test devices. They also requested CDFW publish a list of devices that will meet their requirements.

- CDFW explained that VMS devices cannot be used because their use requires building a whole new system for the state to be able to access the data that is housed by a federal agency, which is cost prohibitive. CDFW stated that they are unable to produce a list of approved devices since a state agency cannot be perceived as advocating for a particular device. As they develop their electronic monitoring program, CDFW is monitoring whether adjustments need to be made to the RAMP regulations to ensure alignment with existing mandates (i.e., evisceration options and transiting a closed area with electronic monitoring).

Public comment was taken on the topic at hand.

- Richard James, Marin County resident, expressed a need for keeping the cost of electronic monitoring low or allow fishermen to use existing equipment. He asked if it was possible to have TNC fund electronic monitoring or have some organization fund an open-source project to develop a new device or program that will meet RAMP requirements.
  - CDFW explained that the goal is to be flexible and not require one specific device.

- Ed Tavasieff, commercial fisherman, asked whether implementing electronic monitoring would discontinue biweekly reporting requirements.
  - CDFW expects that electronic monitoring may replace biweekly reporting.²

7. Updates on the Executive Committee’s discussion regarding the 96-hour gear servicing requirement and use of a dump/sort box as standard fishing practice.

96-Hour Gear Servicing Requirement
During the October 2020 meeting the DCTF passed a recommendation to amend FGC §9004 (the 96-hour gear servicing requirement) to a 9-day soak time, in alignment with the proposed Section 29.80 Title 14, CCR for the California recreational Dungeness crab fishery. The recreational Dungeness crab gear servicing requirements have since gone into effect. The DCTF recommendation was not included in SB 80 due to opposition from environmental organizations. An Executive Committee Member requested clarification about why environmental organizations may have concerns about extending the gear servicing requirement. In response, Geoff Shester, shared a letter outlining the organization's concerns and suggestions on how to address them. DCTF Members asked clarifying questions and discussed aspects of the letter.

- Some DCTF Members expressed concern about negotiating with NGOs to move forward legislation while other DCTF Members thanked Mr. Shester for sharing the letter during the meeting.
  - Mr. Oppenheim explained that for an urgency bill, like SB 80, to move forward, a ⅔ vote is needed. From a legislative perspective, it did not make sense to threaten the passage of the bill by adding something controversial, like an amendment to the gear servicing requirement. Mr. Shester added that several organizations outside of Oceana had similar concerns and suggested finding a path forward that could allow broader support by NGOs while still being recommended by the DCTF.
  - Various DCTF Members noted that many of the concerns brought up in the letter have already been

² Following this meeting, CDFW updated their position on this question. The biweekly reporting requirement is anticipated to continue even after an electronic monitoring program is in place.
addressed by implementing the lost fishing gear recovery program where fishermen are fined for gear recovered after the season. Additionally, the soon-to-be implemented electronic monitoring program would also address the suggestions outlined in the letter. A few DCTF Members added that the cause of gear loss is inclement weather and large swells, not from longer service intervals. They emphasized that fishermen do not want to lose gear because it’s too costly. A DCTF Member stated that it’s important to address issues brought up by Oceana and other NGOs because they will persist. They suggested further exploring the concept of rewarding fishermen for low gear loss. DCTF Members agreed to revote on the recommendation from the October 2020 Meeting. They stated that it was reasonable to align the commercial gear servicing requirement with the recreational fishery. CDFW commented that they did not support the 9-day servicing requirement for the recreational fishery and that it was negotiated by fishermen and the Fish and Game Commission.

Public comment was taken on the topic at hand.

- Richard James, Marin County resident, expressed support for Mr. Shester’s comments. He acknowledged that while Dungeness crab fishing is hard work, it is also very profitable. He invited fishermen to join him on the beaches to see the impact of lost and abandoned Dungeness crab fishing gear that washes up every year.

- Ed Tavasieff, commercial fisherman, stated his desire to reduce gear loss, but explained it’s impossible to eliminate it completely due to vessel traffic, especially container ships, and heavy weather. He thanked Mr. James for his beach cleanup efforts. He suggested adding a weather exemption to the DCTF’s recommendation and changing the term “lost” gear to misplaced gear.

A straw poll was taken to assess the level of agreement on whether the DCTF supports revoting on the 2020 recommendation.

Straw Poll: The DCTF reaffirms their October 2020 recommendation to amend FGC §9004 (the 96-hour gear servicing requirement, weather permitting) to a 9-day soak time, in alignment with Section 29.80 Title 14, CCR for the California recreational Dungeness crab fishery. The Dungeness crab fishery has tools in place to address gear loss concerns including an electronic monitoring mandate, a lost-gear recovery program that charges for lost gear. The DCTF recommends CDFW employ incentives for less gear loss - DCTF will continue to explore.

(13 up, 5 sideways, 0 down, 1 abstain) - Pass

ACTION: Consideration and possible adoption of recommendations related to the 96-hour gear servicing requirement and the legal use of a dump box as standard fishing practice.

APPROVED: The DCTF recommends and reaffirms their October 2020 recommendation to amend FGC §9004 (the 96-hour gear servicing requirement) to allow a 9-day soak time, weather permitting. This recommendation is in alignment with §29.80 Title 14, CCR for the California recreational Dungeness crab fishery.

The Dungeness crab fishery has tools in place to address expressed concerns related to the potential for increased gear loss including an electronic monitoring mandate and lost-gear recovery program that charges for lost gear. The DCTF will work with CDFW to explore the development of additional programs to provide incentives for reducing gear loss (e.g., rewards for fishermen that lose minimal gear each season).

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Vote of all DCTF Members (ex officio Members abstained; vacant seats not included in tally):
Thumbs up (14): John Barnett, Scott Bertelsen, George Bradshaw, Tony Cannia, Mark Capra, Mike Cunningham, Tom Hart, Scott Hockett, Harrison Ibach, Nick Kreiger, Porter McHenry, Rick Powers, Dick Ogg, Zach Rotwein
Thumbs sideways (5): Bill Blue, Vince Doyle, David Haddad, Matt O’Donnell, Randy Smith
Thumbs down (0)
Abstain (1): Anthony Caito
Absent (1): Jim Anderson

Sort Box
The issue of the sort box was discussed by both the DCTF Executive Committee and the DCTF earlier in 2021 and continues to be a priority topic because of a recent case involving a fisherman in possession of sublegal crabs in his “sort box” while actively fishing. A sort box is used by fishermen to hold crabs until they are able to sort them and return them to the ocean. The DCTF is concerned that FGC §8278 may not allow for the use of a sort box, which is a traditional fishing practice. During the March 2021 DCTF Meeting, the DCTF informally requested CDFW Marine Region and LED to develop guidance or an FAQ on how a sort box may be legally used. As the case mentioned is pending, CDFW is unable to provide guidance or clarifications at this time. Once resolved, LED will be able to participate in a more robust discussion with the DCTF. LED cautioned the DCTF about recommending changes to possession laws in the Fish and Game code since it could have unintended consequences for Dungeness crab and other fisheries. DCTF Members asked clarifying questions and discussed aspects of the dump box issue.

- Various DCTF Members discussed how they use the sort box to temporarily hold female and short crabs as they are sorting and pulling in traps. Once sorting is complete, sublegal and female crabs are returned to the ocean and legal crabs are placed in a hold. DCTF Members emphasized that even if short or female crabs are in the sort box, there is no intent to sell those crabs.

- Various DCTF Members expressed frustration about the lack of clarity on whether the use of a sort box is legal. Members are seeking this clarity so they can avoid potential citations from this common fishing practice.

- The DCTF explored options to address this issue so fishermen are not cited for standard fishing practices including:
  - Enforcing sublegal and female crab regulations at the point of landing (not on the open ocean)
  - Identify a square footage of short crab allowed on a boat before it’s counted as possession
  - A requirement that individuals stop fishing to empty the dump box when it’s full.

  A DCTF Member emphasized the need to empty the dump box quickly to prevent dead or dying crab, which could be in violation of wanton waste laws. Various DCTF Members agreed that the spirit of the law is to enforce possession laws at the dock, upon landing. Some DCTF Members stated that there would be loopholes and unintended consequences if the law was only enforced at landing. A couple DCTF Members thought it was best to wait for the case to be completed before taking action, while other Members thought it was important to address the issue now and not wait until a future meeting.

- The DCTF discussed possession laws in other states. Oregon law states that: “Any undersized or female Dungeness crab taken from the Pacific Ocean must be released within 15 minutes of capture unharmed into the Pacific Ocean at the point of capture.” CDFW stated that this option has been discussed by LED, it could be helpful for fishermen who are actively sorting, but the 15 minutes may not work for larger vessels. DCTF Members discussed the pros and cons of the Oregon law.
  - Various DCTF Members voiced concerns that the 15 minutes outlined in the Oregon law would cause confusion, felt like micromanaging, and would be difficult to enforce. Several DCTF Members preferred having the 15 minutes as a guideline or best practice, but not in regulation. Various DCTF Members continued to express their preference that female and short crab possession be enforced at the dock. However, there would need to be bounds to prevent fishermen from sorting and dumping illegal crab in the harbor rather than close to the location they were originally caught. Mr. Oppenheim added that there is an opportunity for the Joint Committee on Fisheries and Agriculture to work with CDFW and/or LED on drafting potential language to be approved by the DCTF, and suggested they make a recommendation requesting this.

Public comment was taken on the topic at hand.
- Ed Tavasieff, commercial fisherman, emphasized that defining active fishing is key to informing any legislative changes. He added that the 15-minute provision in Oregon’s law is challenging to enforce. He also noted the
importance of returning crabs immediately to the water in the area where they were caught to increase survivability and overall well-being.

A straw poll was taken to assess the level of agreement on whether the DCTF supports making a recommendation regarding the dump box.

Straw poll: The DCTF recommends CDFW and the Legislature discuss FGC 8278 & [insert other relevant regulations] and work with the DCTF to update the regulations to reflect best fishing practices:

- Sort while actively fishing, and return short and female back into the water as soon as possible
- Sort box cleared 15 minutes after crab string run or before next string
- Avoid dead/weak crab in the box to prevent wanton waste
- 1% sub-legal\(^3\) and female possession\(^4\) requirement enforced at the time crabs are offloaded off the boat/transferred onto the dock for sale

(2 up, 8 sideways, 7 down, 1 abstain) - Fail

The straw poll showed that there would not be enough votes to move this recommendation forward. The DCTF is not in agreement on next steps for addressing the sort box issue. For that reason, the DCTF agreed to pause the conversation about the sort box at this time and circle back after the legal case has been resolved and CDFW can fully engage in a conversation.

8. Next Steps

The meeting next steps include:

The Admin Team/Strategic Earth will
- Work with OPC to update the DCTF webpage to include the PowerPoint presentations from the meeting
- Develop a meeting summary
- Develop a report to send to the Joint Committee on Fisheries and Aquaculture, CDFW, OPC, and the Fish and Game Commission
- Make the meeting recording available upon request for 30 days following the meeting
- Continue sharing relevant updates through the DCTF public email list
- Track the timing of revisiting the sort box discussion

CDFW will
- Share a 2019-20 FY Dungeness Crab Account update
- Continue development of the electronic monitoring program
- Continue exploring DCTF discussion topics related to the RAMP (i.e., overlap with CPS aerial surveys, research NOAA line marking best practices, etc.)

DCTF Members will
- Review draft materials including meeting summary and DCTF report (see Admin Team next steps)
- Speak with their constituents/peers about DCTF-related topics to learn about fleet perspectives, including sort boxes, electronic monitoring, etc.

9. Adjourn

\(^3\) Crabs measuring less than 6.25”
\(^4\) Possession of female crab is prohibited and not included in the 1% allowance