

Dungeness Crab Fishing Gear Working Group

Development of Risk Assessment Mitigation Program (RAMP)

CDFW Update to the Dungeness Crab Task Force

October 16-18, 2017

Ukiah, CA

Working Group Composition

- California Department of Fish and Wildlife (CDFW) in partnership with National Marine Fisheries Service (NMFS) and the California Ocean Protection Council (OPC), convened the Dungeness Crab Fishing Gear Working Group in September 2015
- 20-member Working Group composition:
 - Commercial fishermen from 9 representative ports
 - 1 recreational fisherman
 - 1 CPFV
 - 3 NGO representatives
 - 1 whale entanglement response network
 - 2 CDFW
 - 2 NMFS
 - 1 US Coast Guard

Working Group: Collaborative Research

- NOAA disentanglement trainings in whale entanglement response
- Gear modification projects:
 - Evaluating line profiles and load strengths of different types of fishing line
 - Testing use of different line types/colors in the water column
- Whale/forage distribution research to evaluate capabilities of forecasting whale distributions and densities
- Electronic reporting tools
 - Pilot use data loggers: solar loggers and TNC's eCatch
- Whale and crab gear overlap:
 - Aerial and vessel surveys

Development of Draft RAMP

- Whale/forage data shared at May 2017 Working Group meeting
 - Factors that increase entanglements (i.e. nearshore anchovy, domoic acid season delays)
- Is there a way to assess these risks pre-, during, and post-season and reduce risk of entanglements through appropriate responses?
- Draft Risk Assessment Mitigation Program (RAMP)
 - Draft risk assessment framework (RAF) – list of factors and questions that contribute to our understanding of risk
 - Draft management measures toolbox (MMT) – voluntary and regulatory measures that could be considered to adaptively respond to entanglement risk

RAMP: Key Groups

- Agencies: CDFW, in consultation with NMFS and support from OPC
- Core Team (CT)
- Evaluation Team (ET)

Agencies

- CDFW lead in consult w/NMFS
 - Convenes meetings; in-person and conference calls
- NMFS lead on whale information
- Agencies support RAMP
 - Facilitates information needs
- CDFW Director will act on information received from ET
 - If action warranted & based solely on ET recommendation, CDFW will notify fleet participants

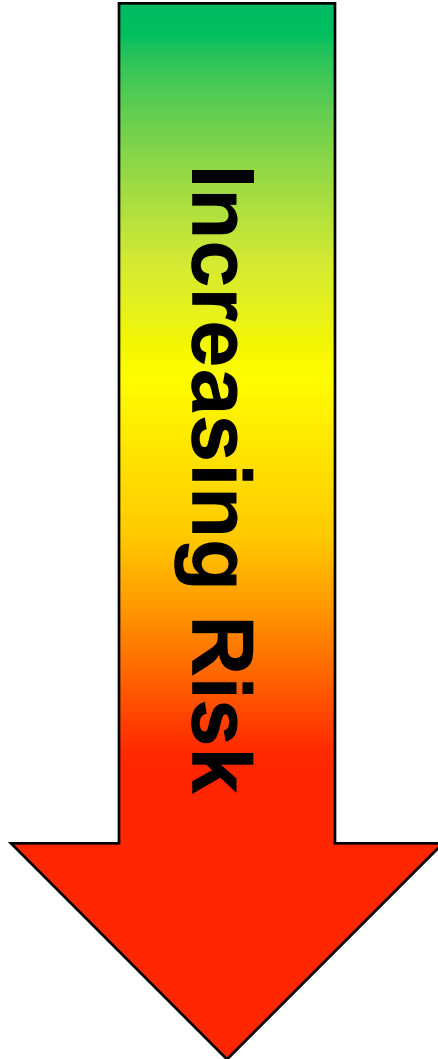
Core Team (CT)

- Members include CDFW & NMFS staff, fishermen and ENGO's
 - For 2017-18 pilot, Working Group will act as CT
- Develop & maintain RAF and MMT
- Conduct/review RAF process with agencies (3x per year)
- Identify additional data needs to help run program
- Identifies members of Evaluation Team (ET)
- Annually evaluates process of RAMP

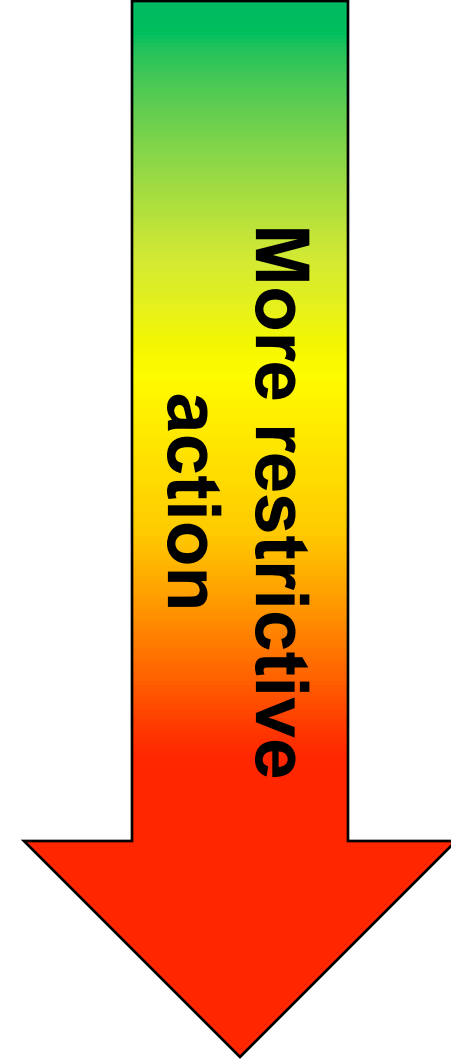
Evaluation Team (ET)

- Members include CDFW & NMFS staff, fishermen and ENGO's
 - For 2017-18 pilot, Working Group will act as ET
- Rapidly responds & convenes when notified by CDFW/NMFS
 - Request any additional representation on ET
 - Review/evaluate available information
 - Request more information to verify & clarify situation (i.e. flyovers, fisherman and researcher input, whale watching tours, etc.)
 - Discuss MMT options to address risk
 - Consider “guiding principles”
 - Determine what action from the MMT is warranted (if any), including how to re-establish regular fishing practices
 - Make recommendations to Director

Risk Assessment Framework & Management Measures Toolbox



- Designed to detect possible increase in entanglement risk and management measures that could be deployed to reduce that risk



Pilot RAMP Considerations During the 2017-18 Dungeness Crab Fishing Season

- CT will monitor entanglement risk with RAF
 - Prior to season start date
 - Mid-season, Feb/Mar
 - Late season, May/June
- ET will either convene if necessary or have “mock” meeting for testing purposes
 - Port-level meetings
- Evaluation Post-Pilot
 - Structure/function
 - Timing
 - Funding

Glossary of Acronyms

- Core Team (CT) – team that develops and maintains RAF and MMT and annually evaluates RAMP
- Evaluation Team (ET) - team that rapidly assembles under red/yellow risk scenarios, requests additional information/representation and recommends management measures to Director according to MMT
- Department of Fish & Wildlife (CDFW)
- National Marine Fisheries (NMFS)

Glossary of Acronyms

- Risk Assessment Mitigation Program (RAMP)
- Risk assessment framework (RAF) – factors that inform increased risk
- Management Measures Toolbox (MMT) – voluntary and regulatory measures that reduce entanglement risks