

Staff Summary for April 17-18, 2024

5. Experimental Fishing Permit (EFP) Program Major Amendment Request**Today's Item**Information Action

Consider approving a major amendment to the permit for EFP Application 2023-02 related to pop-up gear testing in the Dungeness and rock crab fisheries. (Pursuant to Section 91)

Summary of Previous/Future Actions

- | | |
|---|--------------------------|
| • Commission approved EFP | June 14-15, 2023 |
| • Department informed the Commission about an EFP major amendment request | February 6, 2024 |
| • Published notice of receipt of EFP major amendment request | February 13, 2024 |
| • Department transmitted recommendation for EFP major amendment request | February 29, 2024 |
| • Published notice of receipt of Department recommendation | March 14, 2024 |
| • Today discuss and consider approving EFP major amendment request | April 17-18, 2023 |

Background

The Commission and Department jointly administer the EFP Program, authorized by the California Fisheries Innovation Act of 2018 (California Fish and Game Code Section 1022) and established through regulations adopted by the Commission (Section 91). The EFP Program fosters innovation and experimentation in California's commercial and recreational marine fisheries to inform the conservation and sustainable use of the state's marine resources. The program provides opportunities for fishers and scientific partners to obtain limited, short-term exemptions from state fishing laws and regulations to test and deploy new management approaches or pursue fishery-related research. For additional information about the program, see the Department's EFP webpage at <https://wildlife.ca.gov/Conservation/Marine/EFP> and the Commission's at <https://fgc.ca.gov/EFP>.

At its June 14-15, 2023 meeting, the Commission approved an [EFP to the National Marine Sanctuary Foundation \(Commission Application Tracking 2023-02\)](#) to test the commercial use of pop-up fishing systems in the California Dungeness crab fishery to inform alternative gear under the Department's Risk Assessment Mitigation Program (RAMP).

Pursuant to subsection (k)(2) of Section 91, an EFP holder may request amendments to an approved EFP at any time during the term of the permit. Proposed amendments are categorized into three types: administrative updates, minor amendments, or major amendments. Section 91 authorizes the Department to approve administrative and minor amendments; however, major amendments are subject to the same Department review, public notice, Commission action, and Department issuance procedures as a new application [subsection (k)(2)(A)(3)]. Major amendments are described as modifications to an approved EFP that exceed the allowances placed on the permit concerning the amount and type of

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species that may be taken, the geographic location where fishing may occur, the amount or type of gear that can be used, or the number of vessels or persons that may conduct the authorized activities.

EFP Amendment Request Overview

On February 6, 2024, the Department notified the Commission of an accepted major amendment request for the National Marine Sanctuary Foundation EFP (Exhibit 1). The foundation is requesting to amend several special conditions, including the season (retaining Dungeness crab during RAMP closures), the number of authorized agents and vessels, gear (number of pop-up systems and traps, gear marking), the fishing location, and adding rock crab fishery testing. The Commission provided a [notice of receipt to interested parties](#) on February 13, 2024.

The Department conducted its technical review of the applicant's amendment request and transmitted its recommendation to the Commission on February 29, 2024, including special conditions as specified on form DFW 1103 (exhibits 1 and 2). The Commission provided a [notice of receipt of the Department recommendation](#) to interested parties on March 14, 2024. A table summarizing current EFP conditions, the permittee's major amendment requests, and the Department's recommendations for each, including rationale, is provided as Exhibit 4.

Today's Meeting

The Department will present an overview of the major amendment request and provide its recommendations and rationale for each of the requests for Commission consideration and potential approval (Exhibit 5).

Significant Public Comments (N/A)**Recommendation**

Commission staff: Approve the major amendment request to the National Marine Sanctuary Foundation EFP with proposed special conditions as specified in Exhibit 2, as recommended by the Department.

Department: Approve the National Marine Sanctuary Foundation EFP major amendment with proposed special conditions as specified on form DFW 1103.

Exhibits

1. [Amendment request, transmitted to the Commission from the Department on February 6, 2024](#)
2. [Department recommendation memo, received February 29, 2024](#)
3. [Draft form DFW 1103, including standard terms and proposed amended special conditions for major amendment](#)
4. [Commission staff table summarizing some of the current EFP conditions, the EFP holder's requests, and the Department's proposed special conditions, dated April 5, 2024.](#)
5. [Department presentation](#)

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Motion

Moved by _____ and seconded by _____ that the Commission approves the major amendment request for the National Marine Sanctuary Foundation EFP with special conditions as recommended by the Department.

OR

Moved by _____ and seconded by _____ that the Commission approves the major amendment request for the National Marine Sanctuary Foundation EFP with special conditions as recommended by the Department, except as follows: _____.



**National
Marine Sanctuary
Foundation**

To: CDFW Marine Region
Attn: EFP Coordinator
20 Lower Ragsdale Drive, Suite 100
Monterey, CA 93940
efp@wildlife.ca.gov

From: Greg Wells, Gear Innovations Manager
National Marine Sanctuary Foundation
[REDACTED]
[REDACTED]

Date: ~~November 16, 2023~~ revised on January 31, 2024

Subject: Experimental Fishing Permit [REDACTED] Amendment Request

We would like to request the following amendments to our currently issued Experimental Fishing Permit [REDACTED]. It is our understanding that these changes would constitute a major amendment, and the associated fee has been paid. Please let me know if you have any questions regarding these amendments or require additional information.

- 1) **Allow the retention of catch.** Under the issued EFP and special conditions, participating vessels may retain and land Dungeness crab if the Fishing Zone where gear was deployed is open for commercial activity (Authorized Species, Take, and Landing Requirements, Special Condition 7). Special Condition 13 also specifies that when fishing within any area closed to commercial Dungeness crab fishing all deployed traps must be closed and unbaited. We request to allow vessels to retain and land Dungeness crab during the statutory commercial crab fishing season, including during fishing zone closures implemented under the RAMP. Additionally, we request that vessels also be allowed to retain and land incidentally caught rock crab if they hold a valid permit. When conducting EFP activities after the statutory season, all deployed traps will be closed and unbaited.
- 2) **Allow vessels to conduct testing activities in the rock crab fishery.** Under current regulations (CCR Title 14 Section 125(b)(3)), pop-up devices cannot be used or possessed in the rock crab fishery. We request to allow vessels to test pop-up gear with rock crab traps if they hold a valid permit. Vessels would use pop-up fishing systems with single traps or at one end of multi-trap trawls. Because the rock crab fishery is year-round and occurs in shallow waters (typically less than 20-30 fathoms), vessels would have the option to trial pop-up gear using hybrid trawls, with a pop-up fishing system on one end and a traditional buoy line on the other. The basis for this request is: (1) we have received interest from fishermen to test pop-up gear in the rock crab fishery due to operational/economic considerations and because the season is open year-round, (2) to allow gear to be tested across a broader range of fishing and weather conditions throughout the year, and (3) to expand the testing and use of pop-up gear in other fixed gear fisheries that pose entanglement risk to whales and other marine life.

- 3) **Allow pop-up gear testing with multi-trap trawls.** Under the issued EFP and special conditions, all gear shall be deployed as single traps, i.e., multiple traps cannot be connected by a common groundline (Gear Allowances, Specifications and Marking Requirements, Special Condition 17). We request to allow vessels to fish pop-up gear with multi-trap trawls (up to 20 traps) with a pop-up system on one end of each trawl. Vessels will have the option to deploy pop-up systems on the other end of their trawls to allow gear to be hauled from either end based on sea conditions or other operational circumstances. We anticipate vessels conducting EFP activity outside the statutory season (with no retention of crab) would use shorter trawls and only connect traps as necessary to permit safe and efficient grappling of gear should any pop-up gear failures occur.
- 4) **Increase the number of pop-up systems and traps that can be deployed.** As described in our EFP application, we proposed that vessels would trial up to 20 pop-up systems using single traps and expected no more than 50 traps would be deployed at any given time. Under the issued EFP and special conditions, a maximum of 20 traps per vessel may be deployed per trip (Gear Allowances, Specifications and Marking Requirements, Special Condition 18) and the cumulative number of traps deployed by all vessels shall not exceed 50 traps (Gear Allowances, Specifications and Marking Requirements, Special Condition 19). We request to allow vessels to deploy up to 200 traps per trip and to remove the cumulative limit on the number of traps deployed at any given time. Based on the number of pop-up systems available in the Foundation's gear cache, this would allow 10 vessels to fish up to ten 20-trap trawls with pop-up systems deployed on one end of each trawl.
- 5) **Consider backup releases as optional approaches to gear recovery.** As described in our EFP application, each pop-up system would be configured with a backup release mechanism (i.e., Resqunit reserve buoys, galvanic time releases, biodegradable twine) to allow gear to be retrieved in the event of any failures. We request that deploying gear with backup releases be optional, rather than required. For most participants, grappling provides a more practical, effective, and efficient means of recovering gear if a pop-up system fails. Vessels using pop-up gear with single traps will connect a length of line attached to a weight or anchor to provide a larger target for grappling.
- 6) **Allow additional authorized agents and vessels.** Under the issued EFP and special conditions, a maximum of five authorized agents and five vessels may participate in the EFP (Authorized Agents and Vessels, Special Condition 1). The initially issued permit listed two authorized agents and vessels, and three additional authorized agents and vessels were added through a minor amendment. We request to allow up to ten authorized agents and ten vessels to participate in the EFP. As part of this amendment, we request to add the following authorized agents and vessels to the EFP:
 - Sean Cross; [REDACTED]
[REDACTED]
- 7) **Expand the geographic area where gear may be deployed.** Under the issued EFP and special conditions, traps may only be deployed between the Sonoma/Mendocino County line (38°

46.125' N. latitude) and Lopez Point (36° 00' N. latitude) (Allowable Fishing Area and Time of Year, Special Condition 10). We request to expand the northern boundary where gear may be deployed from the Sonoma/Mendocino County line to the California/Oregon border (42° N. latitude) to allow interested vessels in fishing zones 1 and 2 to participate in the EFP.

- 8) **Allow testing of additional gear types.** Under the issued EFP, participating vessels have the option to test four pop-up fishing systems (i.e., Desert Star Systems ARC-1XD, EdgeTech 5112, Fiomarine Fiobuoy, Guardian Ropeless System). We request that the following gear types be added as options under the EFP.
- Sub Sea Sonics Timed Release Pop-up System (TR4RT) and Acoustic Release Pop-up System (AR4RT). Both will be used with the Guardian line management system and Sub Sea Sonics Trap Timer for gear location marking. Descriptions of the gear, including the Trap Timer app, are provided in [Sub Sea Sonics EFP application](#).
 - Ashored Innovations MOBI (Modular Ocean Based Instrument) and Automated Tracking and Location Aggregation System (ATLAS) for gear location marking. A summary description of the gear is provided as an attachment.
 - NOAA Fisheries-approved weak rope. Since there is a possibility that time-released buoys may be on the surface for a longer period than acoustic on-demand systems, we propose testing [NOAA Fisheries-approved fully formed weak rope](#) (1,700-pound breaking strength) on a portion of the gear during field trials to evaluate the feasibility of its use.
- 9) **Clarify marking requirements when testing Fiobuoy units.** Since the Fiobuoy units do not use buoys, it's not possible to mark the gear as specified in Special Condition 25. We propose to mark one end of the spool body with the identification letters "EC" and the operator's commercial fishing license number. The license numbers and identification letters would be at least 1.5" high.

Ashored Innovations Rope-on-Command Fishing System

Ashored Innovations develops sustainability-enabling technologies for the commercial fishing industry. The Ashored Rope-on-Command sustainable fishing system is designed to remove the vertical buoy lines from the water column. This system's capabilities are further augmented by a software package that allows users to track gear deployments and gather data. Ashored's rope-on-command fishing gear minimizes risks of catch or gear theft, ship strikes, heavy weather, and marine life entanglement.

The Ashored MOBI system is comprised of an acoustic release mechanism, a stainless-steel cage that holds the line and buoys, a deck box and transducer, and a tablet that has the ATLAS software application installed. Ashored's MOBI (Modular Ocean Based Instrument) is designed to contain a fisher's coiled rope on the ocean floor until they return to the area to collect their gear. MOBIs are activated with an acoustic release (with a passive backup timer) and can be triggered to surface by an on-vessel deck box transducer at ranges up to 1.5 nautical miles. The acoustic system is also capable of performing range, reporting under water temperature, and enforcement IDs to allow agencies to release gear.

Ashored's MOBI sustainable fishing gear has been tested and used by fishermen in Canada and the United States. It has also been successfully deployed in a zone closed to conventional fishing gear due to sightings of the North Atlantic right whale, allowing fishermen to fill their quota of snow crab before the end of the fishing season.

Figure 1. MOBI



Figure 2. MOBI with Rope Containment Unit



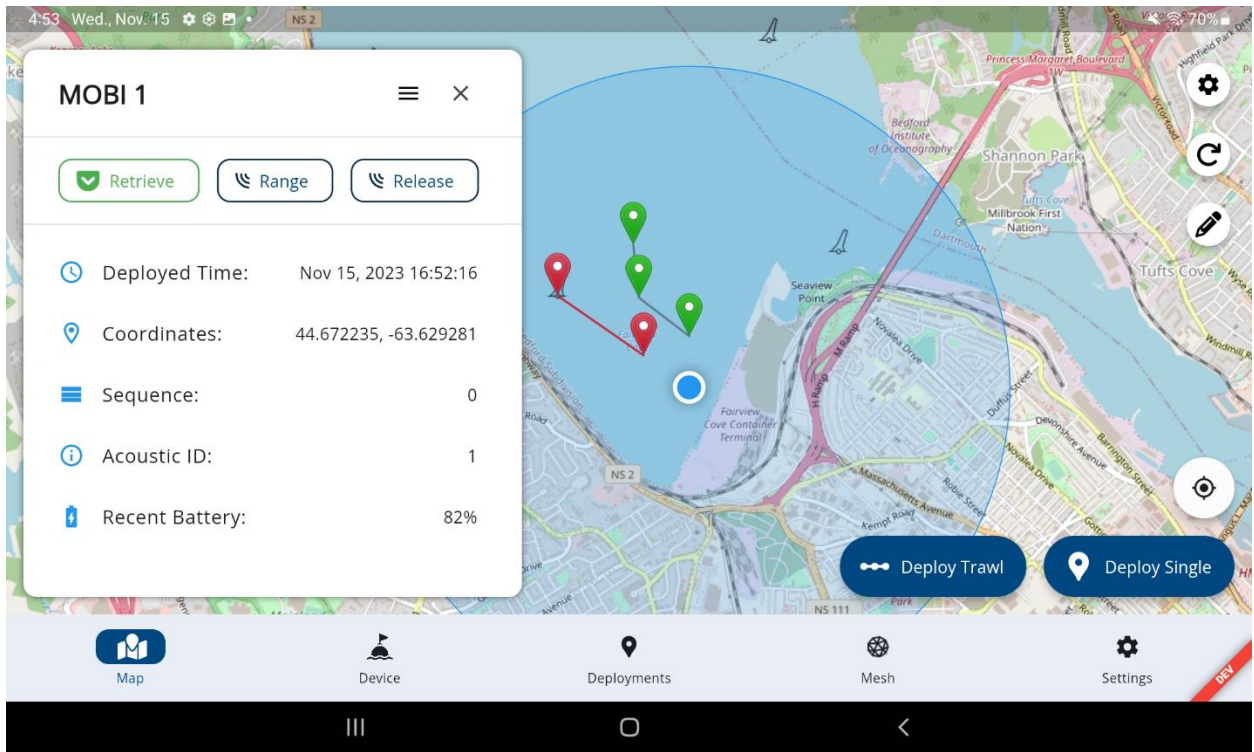
Figure 3. Deckbox



Figure 4. Transducer (Hydrophone)



Figure 5. Tablet with ATLAS Software



Release Mechanism – MOBI (Modular Ocean Based Instrument)

The MOBI (Figure 1) is the main component to the ROC system. It is responsible for communicating with the deck box and ATLAS+ software via acoustic signaling or Bluetooth functions. It is bolted to the Rope Containment Unit (Figure 2) that is attached to fishing gear by a groundline. The Rope Containment Unit is a stainless-steel cage that is used to hold the buoy and buoy line in place until the acoustic release is activated. The MOBI is depth rated to 350 meters (191 Fathoms). The release mechanism consists of a powder coated steel magnetic release key (with key float to reduce mechanical interference when releasing). The release key is placed on the key slot on the MOBI by the buckle, and the lid is held in place by the buckle. Upon receiving the release request, the MOBI engages the magnet and the flotation of the attached buoys allows the lid to surface.



The deck box acts as the on-board command center for the MOBI and ATLAS+ software. The transducing hydrophone (Figure 4) is connected to the deck box by a cable. It connects to the ATLAS+ software via Bluetooth, and together they communicate to send and receive acoustic signals from the MOBI's receiver hydrophone (Figure 7).

ATLAS+ software and tablet are used to control the deck box and transducing hydrophone to release gear, track gear deployments, range to the gear, and configure the backup release timer, and monitor gear status/battery levels. Additional environmental data such as bottom temperature can be easily

retrieved as well. It supports limitless trawl deployments, pre-configured trawls with automatic overboard detection, and the ability to anonymously display other fishermen's gear from shared databases and contribute to the databases with their own gears deployment location.

Memorandum

Date: February 29, 2024

To: Melissa Miller-Henson
Executive Director
California Fish and Game Commission

From: Charlton H. Bonham
Director

Subject: **Transmittal of California Department of Fish and Wildlife Recommendation on Experimental Fishing Permit Major Amendment Application for Pop-Up Gear Testing in the Dungeness and Rock Crab Fisheries (Greg Wells, National Marine Sanctuary Foundation)**

On November 20, 2023, the California Department of Fish and Wildlife (Department) accepted an Experimental Fishing Permit (EFP) major amendment application submitted by Greg Wells from the National Marine Sanctuary Foundation (applicant) for technical review to amend the following items: allow the retention of Dungeness crab catch during the full statutory season, allow testing in the rock crab fishery, allow pop-up gear testing with multi-trap trawls, increase the number of pop-up systems and traps that can be deployed from a given vessel, consider backup releases as optional approaches to gear recovery, allow additional authorized agents and vessels, expand the geographic area where gear may be deployed, and allow testing of additional gear types, pursuant to subsection 91(d)(1)(B), Title 14, California Code of Regulations (CCR).

Subsection 91(d)(2), Title 14, CCR requires the Department to develop and transmit a recommendation to the California Fish and Game Commission (Commission), including any permit special conditions, within 60 days from the date of application acceptance unless a time extension is needed pursuant to subsection 91(d)(3), Title 14, CCR. On December 18, 2023, the department determined that an extension was required to carefully evaluate the proposed major amendment and any permit special conditions.

The Department recommends that the Commission approve the EFP major amendment with special conditions as specified on form DFW 1103. The proposed special conditions together with the standard terms of the EFP will allow the Department to adequately enforce the permit in accordance with Fish and Game Code Section 1022 and Section 91, Title 14, CCR.

If approved, this option would allow the collection of data and information that will help inform future management decisions regarding alternative gear including whether this gear has the potential to reduce marine life entanglement when scaled up fleetwide.

Melissa Miller-Henson, Executive Director
Fish and Game Commission
February 29, 2024
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Next Steps

Pursuant to subsection 91(f), Title 14, CCR, the Department requests the Commission provide notice of receipt of the recommendation and schedule the application and any proposed permit special conditions for consideration no sooner than 30 days after public notice is given.

If you have any questions on this item, please contact Dr. Craig Shuman, Marine Regional Manager, at (805) 568-1246 or by email at R7RegionalMgr@wildlife.ca.gov.

Attachments: EFP Application (confidential information omitted)
Standard Terms and Proposed Special Conditions (DFW 1103)
Public Notice of Department Recommendation
CEQA Overview Memo and Draft Notice of Exemption

cc: California Department of Fish and Wildlife

Chad Dibble, Deputy Director
Wildlife and Fisheries Division

Craig Shuman, D. Env.
Marine Regional Manager

Garrett Wheeler, Attorney III
Office of General Counsel

Eric Kord, Assistant Chief
Marine Enforcement Division

Jason Kraus, Captain
Marine Enforcement Division

Kevin Hare, Lieutenant
Marine Enforcement Division

Kirsten Ramey, Environmental Program Manager
Marine Region

Joanna Grebel, Environmental Program Manager
Marine Region

Ryan Bartling, Senior Environmental Scientist Supervisor
Marine Region

Morgan Ivens-Duran, Environmental Scientist
Marine Region

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Owen Mulvey-McFerron, EFP Coordinator
Marine Region

James Steffey, EFP Analyst
Marine Region



Experimental Fishing Permit No. [REDACTED]

Revision Date:

MARINE FISHERIES: EXPERIMENTAL FISHING PERMIT TERMS AND CONDITIONS

Pursuant to California Fish and Game Code (FGC) Section 1022 and Section 91, Title 14, California Code of Regulations (CCR), the Experimental Fishing Permit (EFP) holder is authorized to conduct experimental fishing activities according to the requirements of the EFP approved by the Fish and Game Commission (Commission) and issued by the California Department of Fish and Wildlife (Department).

EFP Holder/Entity Administrator Name: **National Marine Sanctuary Foundation (EFP Holder)**

Greg Wells [REDACTED] Gear Innovations Manager (Entity Administrator)

EFP Holder Address: [REDACTED]

Entity Administrator Address: [REDACTED]

Authorized Agent Name: **See authorized agent list on Page 3**

Authorized Agent Address: **See authorized agent list on Page 3**

Vessel Name and ID #: **See authorized vessel list on Page 3**

Description of authorized activity:

Test and commercial use of several pop-up fishing systems (i.e., Desert Star ARC-1XD, EdgeTech 5112, Fiomarine Fiobuoy, Guardian Ropeless System, Sub Sea Sonics TR4RT and AR4RT, Ashored Innovations MOBI) in the California Dungeness crab and rock crab fisheries. The experimental fishing activities may only be conducted under the following conditions:

STANDARD TERMS

These standard terms shall apply to all persons or vessels conducting authorized activities under the EFP.

1. The permit shall be operated only on the vessels named on this form, if applicable. Either the EFP holder or the authorized agent must be aboard the vessel when activities are being conducted under this permit, and both are responsible and accountable for meeting the requirements and limits of this permit.
2. Pursuant to FGC Section 7857(d), the EFP holder or authorized agent shall have a valid copy of the Department issued EFP attached to a signed copy of this form in possession when activities are being conducted under this permit.
3. All persons conducting activities under an EFP must comply with all appropriate state and federal fishing laws and regulations, including but not limited to those relating to protected species, minimum size limits, and seasons or areas closed to fishing that are not otherwise exempted by the permit (see special conditions).



MARINE FISHERIES: EXPERIMENTAL FISHING PERMIT TERMS AND CONDITIONS

- 4. The EFP holder and authorized agent shall cooperate with the Department by allowing personnel designated by the Department to board the fishing vessel on any fishing trip (if applicable) or enter a place of business operated by the EFP holder or authorized agent under this permit, to retrieve, observe, or inspect any logbook, records, data, equipment, procedures, or catch throughout the duration of the permit.
- 5. The EFP holder or authorized agent shall provide Department staff with a 24-hour notice prior to every fishing trip. The contact information for Department staff will be provided for this purpose at the time of permit issuance.

SPECIAL CONDITIONS

As set forth in subsection 91(i), Title 14, CCR, special conditions may be placed on this permit for research purposes and the conservation and management of marine resources and the environment (see following page).

As set forth in subsection 91(k), Title 14, CCR, special conditions may be amended or repealed as necessary for research purposes and the conservation and management of marine resources and the environment.

RECEIPT AND ACKNOWLEDGEMENT

The permit is not valid until the EFP holder has certified by their signature below that they have: 1) read and understand the standard terms and special conditions of the permit; 2) unless otherwise specified in special conditions, paid the appropriate fees specified in Section 704, Title 14, CCR; and 3) returned a signed copy of this form to the Department.

I have read, understand and agree to abide by all standard terms and special conditions of this permit.

EFP Holder Signature

Date

Received by License and Revenue Branch (LRB)

Fee \$ _____

Experimental Fishing Permit No. _____

Revision Date _____

By: LRB

Date



Experimental Fishing Permit No. EFPT2-002

Revision Date: February 23, 2024

Authorization and Special Conditions

List of approved special conditions, names and addresses of any additional authorized agents, and/or names and identification number of any additional authorized vessels.

Authorized Agents and Vessels

1. This EFP is valid only for the authorized agents and vessels named below. The Department may allow up to a maximum of 10 authorized agents and 10 vessels for this EFP, as it deems necessary for research purposes.

a. Authorized Agent Name and Address

1. Marc E. Alley [REDACTED] – Owner/Operator F/V Ronna Lynn
[REDACTED]
2. Khevin R. Mellegers [REDACTED] – Owner/Operator F/V Areona
[REDACTED]
3. Rick Hauschel [REDACTED] – Owner/Operator F/V Polaris
[REDACTED]
4. Holly Fruehling [REDACTED] – Owner/Operator F/V Pacific Legend
[REDACTED]
5. Sean Cross [REDACTED] – Owner/Operator F/V Smeagol
[REDACTED]

b. Authorized Project Vessel

1. F/V Ronna Lynn ([REDACTED])
2. F/V Areona ([REDACTED])
3. F/V Polaris ([REDACTED])
4. F/V Pacific Legend ([REDACTED])
5. F/V Smeagol ([REDACTED])

2. All parties (as specified in 1, above) operating under the authority of this permit must be informed of and agree to abide by all standard terms and special conditions of this permit.

General

3. For the purposes of this EFP the terms “Dungeness crab” and “rock crab” are as defined in FGC Section 8275.
4. The authorized agent and any person who assists the authorized agent shall possess a valid commercial fishing license issued pursuant to FGC Section 7850 prior to engaging in any commercial fishing operations authorized by this permit. All authorized agents, vessels, and any person assisting the authorized agents must also hold the appropriate permits governing commercial take of Dungeness or rock crab.
5. The authorized agent shall possess a valid commercial boat registration issued pursuant to FGC Section 7881 for the vessel named above and display the Department Boat Registration numbers in plain sight on each side of the vessel pursuant to FGC Section 7880.
6. All authorized agents shall only participate in one EFP per fishing trip when participating in multiple EFPs.



7. No other EFP or commercial fishing activities shall take place on the same trip as this EFP, unless specifically authorized by this EFP.

Authorized Species, Take, and Landing Requirements

8. Authorized agents may fish for Dungeness crab and rock crab within the same trip if the authorized agent holds valid permits for those species. Unless specifically exempted by this EFP, adherence to all other regulations regarding the take of these species is required.
9. Authorized agents may retain, possess, and land Dungeness crab when the commercial season is open in that Fishing Zone. Pursuant to FGC Section 8278, only male Dungeness crabs may be taken. No Dungeness crab less than 6 and one-quarter inches in breadth may be taken, possessed, bought, or sold. ~~Except that not more than one percent in number of any load or lot of Dungeness crab may be less than six and one quarter inches in breadth but not less than five and three quarters inches in breadth.~~ Dungeness crab shall be measured by the shortest distances through the body from the edge of shell to edge of shell directly from front of points, ~~lateral spines~~ (lateral spines).
10. Pursuant to FGC Section 8282(a), rock crab less than 4 and one-quarter inches measured in a straight line through the body, from edge of shell to edge of shell at the widest part, shall not be taken, possessed, bought or sold.
11. All incidental catch will be returned to the waters immediately to reduce mortality.
12. All landing receipts must have the state EFP number recorded in the “State Permit #” field, the number of individual crabs recorded under the “# of Fish” field, species of crab specified in the “Notes”, and be transmitted within 24-hours.
13. All authorized agents shall notify the Department’s Law Enforcement Division (LEDMarineNotifications@wildlife.ca.gov) and Marine Region (WhaleSafeFisheries@wildlife.ca.gov) of any landings of Dungeness crab made with EFP fishing gear during a fishery closure due to RAMP. The notification shall include the date, port of landing, number of pounds landed, electronic fish ticket number, and the full name of the receiver.

Allowable Fishing Area and Time of Year

14. Traps may only be placed between the California/Oregon border (42° N. latitude) and Lopez Point (36° 00' N. latitude), and no traps or gear shall be used placed in the water seaward of the 100-fathom line as defined in the Federal regulations and published in Title 50, Code of Federal Regulations Part 660.
15. Authorized agents shall be exempted from the requirement to remove all Dungeness crab traps from state waters by 11:59 pm on the last day of the fishing season, as defined in FGC Section 8276(d), when operating ~~under this EFP because fishing activities may occur at any time during the calendar year.~~ or fishing with traps with pop-up fishing gear systems as authorized under this EFP. No traps shall be placed into the water 30 days prior to the pre-soak period prescribed in FGC Section 8283 or commercial Dungeness crab season opener, whichever comes first.
16. Dungeness crab may only be taken, possessed, or landed during the open statutory season



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~~and subject to domoic acid and quality take restrictions pursuant to FGC Sections 5523, 8276, and 8276.2. as specified in FGC Sections 8276 and Section 8276.1(d) and Section 132.8, Title 14, CCR. Take, possession, and landing of Dungeness crab is subject to domoic acid take restrictions specified in FGC Section 5523. This permit exempts the agent from an early season closure pursuant to Section 132.8, Title 14 CCR, however, take, possession, and landing are prohibited when a season is delayed pursuant to Section 132.8, Title 14 CCR. Take, possession, and landing of Dungeness crab is prohibited when fishing in an area closed pursuant to Section 132.8, Title 14, CCR.~~

17. Possession, take, and landing of rock crab is subject to domoic acid restrictions pursuant to FGC Section 5523.
18. When fishing within any area ~~closed to~~ where take, possession, and landing of commercial Dungeness crab ~~fishing or rock crab is prohibited as defined in 16 or 17,~~ all deployed traps shall be closed and unbaited.
19. The authorized agents must suspend fishing operations or move fishing gear per Department direction in response to circumstances including elevated entanglement risk or in the event of entanglement report in the fishing or testing location. The Department will provide notice by contacting each authorized agent via the phone and/or email address provided on the EFP application.
20. Fishing operations shall abide by all applicable Essential Fish Habitat closures for bottom contact gear as described in Federal Regulations (Title 50, Part 660, Subpart F).
21. Fishing activities shall not occur in any state Marine Protected Areas pursuant to Section 632, Title 14, CCR.

Gear Allowances, Specifications and Marking Requirements

- ~~22. Unless otherwise authorized by the Department, all gear shall be deployed as single traps. Multiple traps shall not be connected by a common groundline.~~
22. All authorized agents must comply with the following requirements with respect to deployment of the authorized pop-up gear fishing systems:
 - a. When fishing single traps, an authorized pop-up fishing gear system shall be connected to each trap. Vessels may connect the trap to a length of line attached to a weight or anchor to provide a larger target for grappling.
 - b. When fishing a string of traps (“trawl”), no more than ten traps shall be connected by a common groundline. An authorized pop-up gear fishing system shall be connected to at least one terminal trap of each trawl.
23. A maximum of ~~20~~ 150 traps per vessel may be used, possessed, or deployed per trip. ~~Such traps are in addition to the tiered allocations specified in FGC Section 8276.5 and Section 132.1, Title 14, CCR. This limitation shall not apply to lost or abandoned gear recovered pursuant to Sections 132.2 and 132.7, Title 14, CCR.~~
- ~~24. The cumulative number of traps deployed by all vessels operating under the authority of this permit shall not exceed 50 traps at any given time.~~
24. All traps must comply with the requirements specified in FGC Section 9011 for Dungeness



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crab or rock crab. All traps used or deployed must have at least one destruct device pursuant to FGC Section 9003 and Section 180.2, Title 14, CCR.

25. The EFP holder shall provide the Department access to the gear marking web-based applications (Ropeless Fisher, Ropeless Control, Trap Tracker, Trap Timer, ATLAS, and the rmwHUB) as identified in the EFP application and amendment for data sharing and enforcement purposes.
26. Authorized agents shall not affix buoy tags specified in subsection 132.1(b), Title 14, CCR and FGC Section 8276.5 to Dungeness crab gear deployed under this EFP. Deployed Dungeness crab gear shall include a trap tag as defined in subsection 132.1(a), Title 14, CCR.
27. For the interval between gear deployment and activation of the pop-up mechanism, authorized agents shall be exempted from the requirements to mark each trap with a buoy as defined pursuant to FGC Section 9005 and Sections 132.6(a) and 180.5, Title 14, CCR. Following release of the pop-up mechanism as identified in the EFP application, the location of each single trap or at least one terminal end of each trawl shall be indicated by the presence of one or more buoys at the surface, as specified in ~~24 and 25~~ 28 and 29. When testing FioBuoy pop-up units, the location of each single trap or at least one terminal end of each trawl shall be indicated by the presence of one or buoyant spools at the surface, as specified in 30.
28. The main buoy and any trailer buoys shall be marked with the operator's commercial fishing license identification number. All identification numbers shall be at least 1.5 inches in height and drawn with a line no less than ~~1/4~~ 0.25 inch thick.
29. Buoy markings shall comply with requirements specified in Section 180.5, Title 14, CCR. Every buoy shall be marked exclusively with the Identification Letters "EC" with at least one buoy marked with the operator's commercial fishing license identification number followed by the Identification Letters "EC".
 - a. Buoys that are 4 inches in diameter or greater shall have Identification Letters marked on four opposing sides.
 - b. Buoys that are smaller than 4 inches in diameter shall have Identification Letters marked on two opposing sides.
 - c. The commercial fishing license identification number shall be at least 1.5 inches in height and drawn with a line no less than 0.25 inch thick.
 - d. The Identification Letters "EC" shall be at least 3 inches in height and drawn with a line no less than 0.25 inch thick.
 - e. All Identification Numbers and Identification Letters on a buoy shall be clearly and distinctly marked, and in a color that contrasts with the buoy; the numbers and letters shall be applied and maintained so that they are visible and legible.
30. When testing FioBuoy pop-up units, one end of the spool body shall be marked exclusively with the operator's commercial fishing license identification number and the Identification Letters "EC". All markings shall be drawn with a line no less than 0.25 inch thick and at least 1.5 inches in height, and larger if available space allows. All markings shall be clearly and distinctly marked, and in a color that contrasts with the spool body; the numbers and letters shall be applied and maintained so that they are visible and legible.
31. Buoy Line Marking Requirements. The authorized agents will test and report on the efficacy and durability of marking lines when requested by the Department.



32. Pursuant to FGC Section 9004, authorized agents shall service their traps at intervals not to exceed 96 hours ~~weather conditions and sea permitting~~. Additionally, when using gear where a Galvanic Time Release (GTR) device serves as the primary release mechanism, authorized agents must service their traps within two hours of the selected release interval. If an authorized agent is unable to comply with these requirements due to hazardous conditions at sea, mechanical breakdown of their vessel, or another circumstances, they must notify the Department as soon as possible via email to the Department's Law Enforcement Division (LEDMarineNotifications@wildlife.ca.gov) and Marine Region (WhaleSafeFisheries@wildlife.ca.gov). Any exemptions will be granted on a case-by-case basis and will be provided in writing.

Other Requirements

33. No testing or fishing for crab may take place unless a functioning electronic monitoring system is installed and used as specified by the Department. The electronic monitoring system must be a satellite or cellular based system designed to monitor location and movement of vessels using global positioning system (GPS) coordinates. The electronic monitoring system must be capable of accurately tracking and recording vessel location at a frequency of at least no less than once per minute without interruption during the entire fishing trip when participating in fishing operations covered under this EFP, including transiting to and from the fishing area. Vessel location data shall be uploaded automatically and made available to the Department or an authorized agent within 24 hours. Authorized agents shall grant the Department access to all data upon request.
34. At least 24 hours prior to commencing a fishing trip during which EFP activity is expected to be conducted, notice of vessel name, anticipated fishing dates, port of departure, and expected landing port shall be made via email to the Department's Law Enforcement Division (LEDMarineNotifications@wildlife.ca.gov) and Marine Region (WhaleSafeFisheries@wildlife.ca.gov). Upon request from the Department, authorized agents shall coordinate with the Department and allow for inspections of the traps and associated gear prior to deployment or when gear is being serviced at sea.
35. Authorized agents shall follow the best practices for avoiding whale entanglement described in the attached guide. This includes fishing gear and incident reporting requirements.
36. The permittee shall provide training to Department personnel on any aspect of the permitted project on request.
37. The permittee shall comply with data reporting requirements as described in Attachment A.
38. The vessel shall be capable of safely carrying an observer when requested by the Department and provide that observer with accommodations equivalent to those provided to the captain and crew for both single and multi-day trips if multi-day trips are conducted. The observer shall be permitted to collect additional opportunistic biological data.
- ~~39. The permittee shall adhere to the gear recovery plan as described in the EFP application. The permittee will further document all lost gear, including traps, buoys and other equipment and submit to the Department at least annually. Failure to keep or submit required information may result in revocation or suspension (including non-renewal) of the permit.~~
39. In instances where gear cannot be retrieved via the primary release mechanism, authorized agents may use grappling or back-up release mechanisms to recover the gear as described



in the EFP application and amendment. The permittee will document all unrecovered gear, per the data reporting requirements in Attachment A, including traps, buoys and other equipment. Failure to keep or submit required information may result in revocation or suspension (including non-renewal) of the permit.

40. Unless otherwise specified by the Department, the permittee shall submit reports pursuant to subsection 91(l), Title 14, CCR to the EFP Coordinator (EFP@wildlife.ca.gov) no later than 60 days after the permit expiration date.
41. Prior to commencing at-sea testing, permittee shall ensure all authorized agents have completed the freely available Level 1 entanglement response training provided by the National Marine Fisheries Service, available at <https://west-coast-training.whaledisentangling.org/#/>. Completion emails shall be forwarded to the EFP Coordinator (EFP@wildlife.ca.gov), Department's Law Enforcement Division (LEDMarineNotifications@wildlife.ca.gov) and Marine Region (WhaleSafeFisheries@wildlife.ca.gov).



Attachment A: Data Reporting Requirements

1. Deployment Data. Permittee or authorized agent shall provide to the Department as soon as practical, but no more than 12 hours after deployment, the following data for each crab trap deployed. Data shall be provided via email to LEDMarineNotifications@wildlife.ca.gov and WhaleSafeFisheries@wildlife.ca.gov.
 - a. The latitude and longitude of each trap, given to the highest precision allowed by onboard instrumentation (“location”), and whether or not the trap was deployed with weak rope. If multiple traps are deployed on a single line (“trawl”), the number and configuration of traps in the trawl and the location of the first and last traps of the trawl.
 - b. The name and vessel ID of the vessel the trap was deployed from.
 - c. The experimental fishing permit number the trap is deployed under.
 - d. The time and date of deployment.
 - e. For non-acoustic releases, the time and date the release mechanism is programmed to allow the marker buoy to surface.
 - f. Which virtual gear marking application(s) were used.
2. Recovery Data. Permittee or authorized agent shall provide to the Department as soon as practical, but no more than 12 hours after recovery or attempted recovery, the following data for each crab trap deployed. Data shall be provided via email to LEDMarineNotifications@wildlife.ca.gov and WhaleSafeFisheries@wildlife.ca.gov.
 - a. The time and date of recovery or attempted recovery.
 - b. The location the gear was recovered or attempted to be recovered.
 - c. The distance between the location where the gear was deployed and recovered.
 - d. The time elapsed between the programmed release time and recovery or attempted recovery.
 - e. The location of any unrecovered traps, and whether they were deployed as single traps or part of a trawl. If deployed as part of a trawl, the number of connected traps.
 - f. Documentation of any pop-up system malfunctions (e.g., early release or unresponsive to release signal).
3. Gear Location Marking. The permittee or authorized agent shall make fishing locations publicly available to other fishers and the public subject to direction of the Department. Communication of fishing location may include notification to local harbor districts and to the Department web pages, and/or other publicly accessible web pages. Via the Desert Star Ropeless Fisher, EdgeTech TrapTracker, Subsea Sonics TrapTimer, or Ashored ATLAS gear marking applications, the permittee or authorized agent shall make available the location following information for the purpose of avoiding gear conflict:
 - a. The location of deployed single traps.
 - b. The location of the first and last traps in a trawl, an indication that they are part of a trawl, and the orientation of the trawl with respect to each terminal end.
4. Coordination with other EFPs. Permittee shall use all available resources to understand where gear may be set, including review of pending and approved EFP applications identified on the [Fish and Game Commission website](#) and checking gear marking applications.
5. In addition to the requirements of subsection 91(l), Title 14, CCR, annual and final reports



shall include:

- a. A table or other database containing deployment and recovery data (requirements 1 and 2 of this attachment) for each trip conducted under the authority of this permit.
- b. A summary of landing data including the number of each crab species landed at each port by each vessel.
- c. The number of trips conducted by each vessel participating in the EFP, the total number of trap deployments, and the number of unsuccessful recoveries.
- d. A summary of the efforts taken to recover lost gear, and the outcome of those efforts.

Major Amendment Request for National Marine Sanctuary Foundation Experimental Fishing Permit: Summary of Current Permit Conditions, Requested Amendments, and Recommendation

April 5, 2024

To support California Fish and Game Commission decision-making at its April 17-18, 2024 meeting regarding a major amendment to the National Marine Sanctuary Foundation’s current experimental fishing permit (EFP; Commission Application Tracking #2023-02), Commission staff has prepared Table 1 summarizing the requested amendments and the California Department of Fish and Wildlife’s recommendation (with rationale) for each.

Requested amendments to the EFP include the season (retaining Dungeness crab during Risk Assessment Mitigation Program closures), the number of authorized agents and vessels, gear (number of pop-up systems and traps, gear marking), the fishing location, and adding rock crab fishery testing. Details of the Department’s proposed special conditions are in the materials for Item 5 of the April 17-18, 2024 Commission meeting, at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=220272&inline>.

Table 1. Summary of current EFP conditions, requested amendments, and the Department’s recommendation

*Key: ***Starred, bolded and italicized** words indicate where the Department’s recommended special conditions are different from the permit holder’s amendment requests. Rationale for differences are provided.*

Current EFP Condition	Permit Holder’s Amendment Request	Department’s Recommendation and Rationale
Retention, possession, and landing of Dungeness crab may occur when the commercial season is open in that Fishing Zone	Allow retention of Dungeness crab during entire statutory season, including fishing zone closures enacted under Risk Assessment Mitigation Program (RAMP).	*Retention, possession, and landing of Dungeness crab when commercial fishery is open in that Fishing Zone and during early closures under RAMP . <i>Rationale:</i> Preserves consistency with other Dungeness crab EFPs, which do not allow harvest during season delays
Testing limited to Dungeness crab fishery	Expand testing to rock crab fishery with appropriate permits (i.e., use with rock crab traps and retention of rock crab)	Supports request
A per-vessel maximum of 20 traps per trip is permitted; cumulative limit on number of traps deployed by all vessels shall not exceed 50 traps at any given time	Per-vessel limit of 200 traps and remove cumulative limit	*Per-vessel maximum of 150 traps/trip; remove cumulative limit; <i>Rationale:</i> Enforcement concern if more than 150 traps are included, and aligns with recently-approved Sub Sea Sonics amendment

Current EFP Condition	Permit Holder's Amendment Request	Department's Recommendation and Rationale
All gear shall be deployed as <i>single traps</i> . Multiple traps shall not be connected by a common groundline	Testing with <i>up to 20 traps</i> connected by a common groundline and at least one pop-up system	<i>*Trawls with up to 10 traps connected by a common groundline and at least one pop-up system;</i> <i>Rationale:</i> Enforcement and safety concerns if more traps are included
The permittee shall adhere to the gear recovery plan as described in the EFP application, which <i>includes a backup release system for gear recovery</i>	Remove requirement to deploy gear with back up release system	Supports request, but specify that grappling or back up mechanisms <i>may be used</i>
Authorize up to 5 agents and 5 vessels	Authorize up to 10 agents and 10 vessels	Supports request
Testing area is bounded by the Sonoma/Mendocino county line (38° 46.125' N. latitude), Lopez Point (36° 00' N. latitude), and the 100-fathom line	Expand testing area northward to California/Oregon border	Support request, with 100-fathom line maintained
Required markings on main and any trailer buoys to comply with Section 180.5, Title 14, CCR;.	Clarify Fiomarine Fiobuoy marking requirements (which do not include a buoy)	Supports request to make explicit, although marking for Fiomarine FioBuoy pop-up units are implied in current EFP conditions.
Testing limited to Desert Star ARC-1XD; EdgeTech 5112; Fiomarine Fiobuoy; and Guardian Ropeless System	Add testing of Sub Sea Sonics TR4RT and AR4RT systems; and Ashored Innovations MOBI + Atlas systems	Supports request
No mention of rope breaking strength in application's descriptions of gear configuration	Specify that incorporation of NOAA-approved weak rope is allowed when testing pop-up units	Supports request



National Marine Sanctuary Foundation EFP Major Amendment

April 17, 2024

Presented to:

**California Fish and Game
Commission**

Presented by:

**Morgan Ivens-Duran
Environmental Scientist
Marine Region**



Outline

- Overview of previously approved EFP
- EFP amendment requests
- Proposed terms and conditions
- CDFW recommendation



Previously Approved EFP

- In June 2023, FGC approved a Tier 2 EFP with:
 - Single traps in the Dungeness crab fishery
 - Dungeness crab retention during the open commercial season
 - Per-vessel limit of 20 traps and cumulative limit of 50 traps
 - Required use of back-up releases
 - Up to 5 agents and vessels
 - Testing between Lopez Point and the Sonoma/Mendocino county line

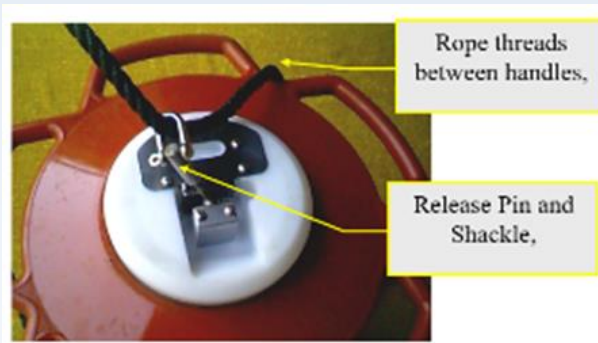


Previously Approved EFP, cont.

Desert Star ARC-1XD



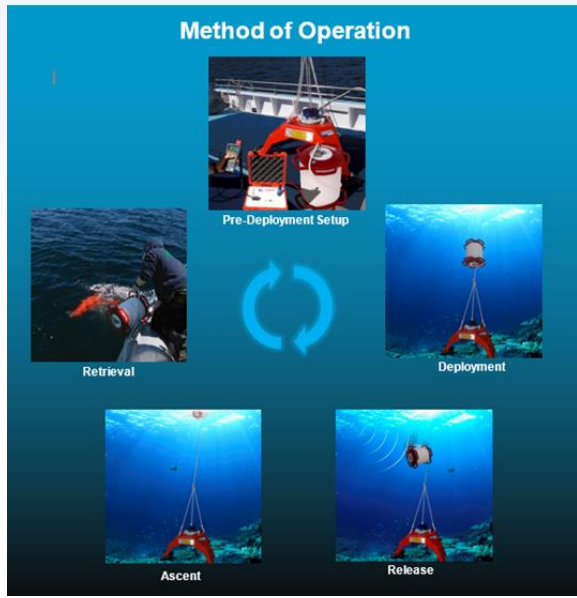
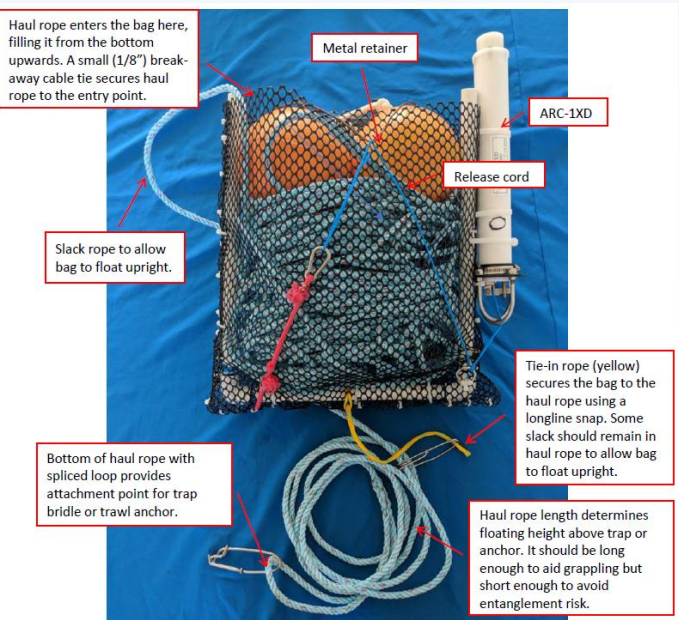
Fiomarine Fiobuoy



EdgeTech 5112



Longsoaker Guardian Ropeless System





NMSF EFP Major Amendment Request

- EFP amendment requests:
 - Retention of Dungeness crab during entire statutory season
 - Testing with rock crab traps and retention of rock crab (with appropriate permits)
 - Per-vessel limit of 200 traps and remove cumulative limit
 - Testing with up to 20 traps connected by a common groundline and at least one pop-up system.

Potential "Trawl" Set Ups

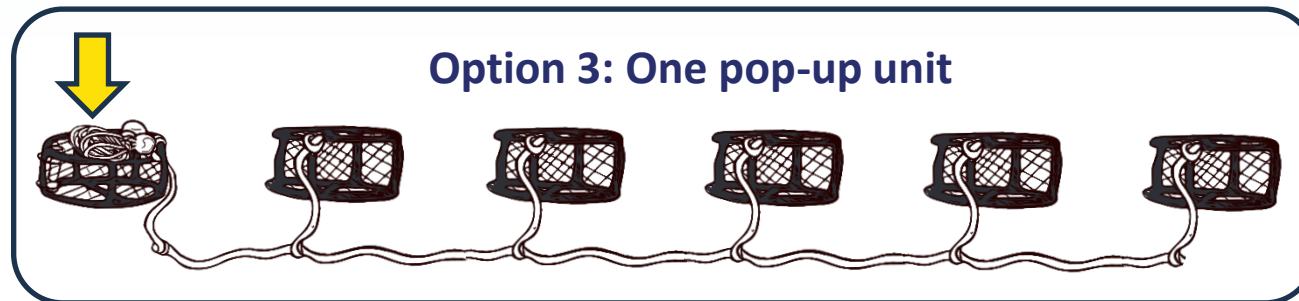
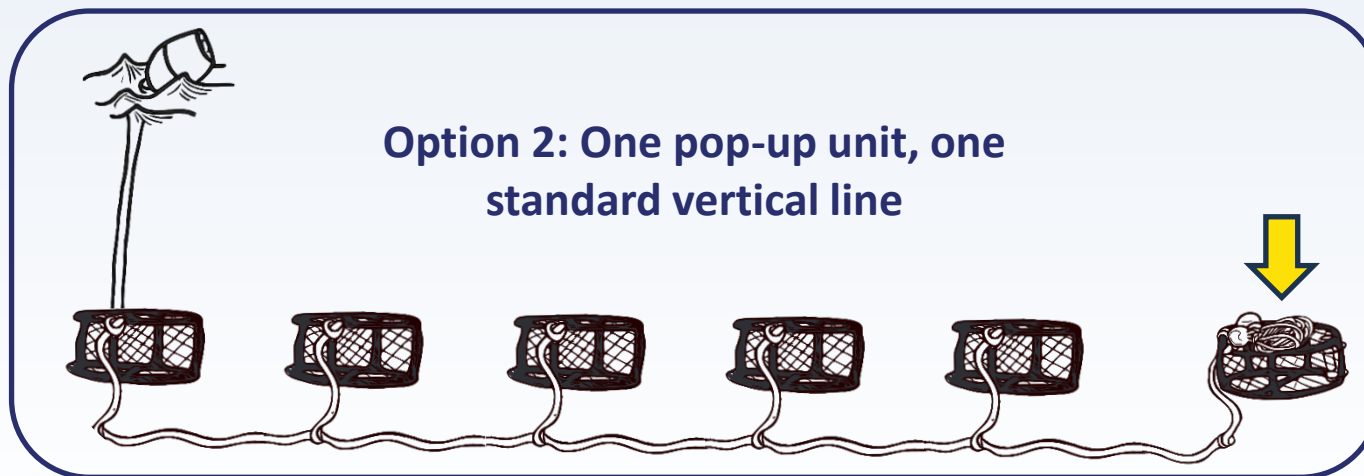
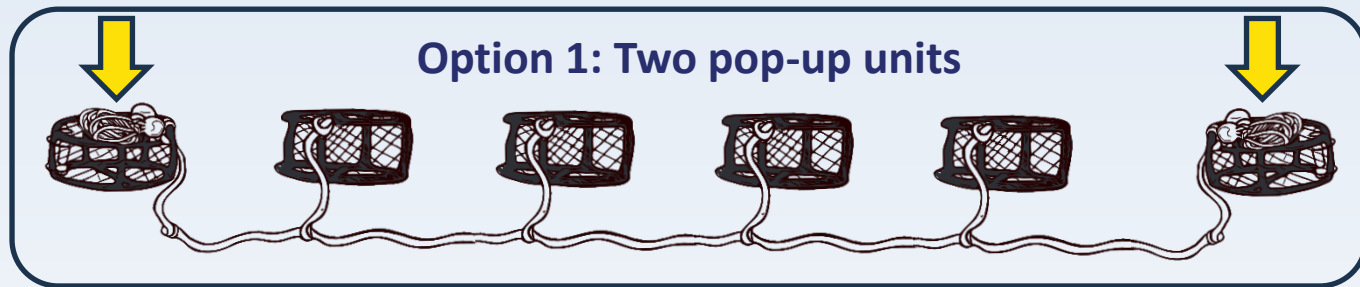


Illustration by E. Brauer (CDFW)

Note: Illustrations are not to scale

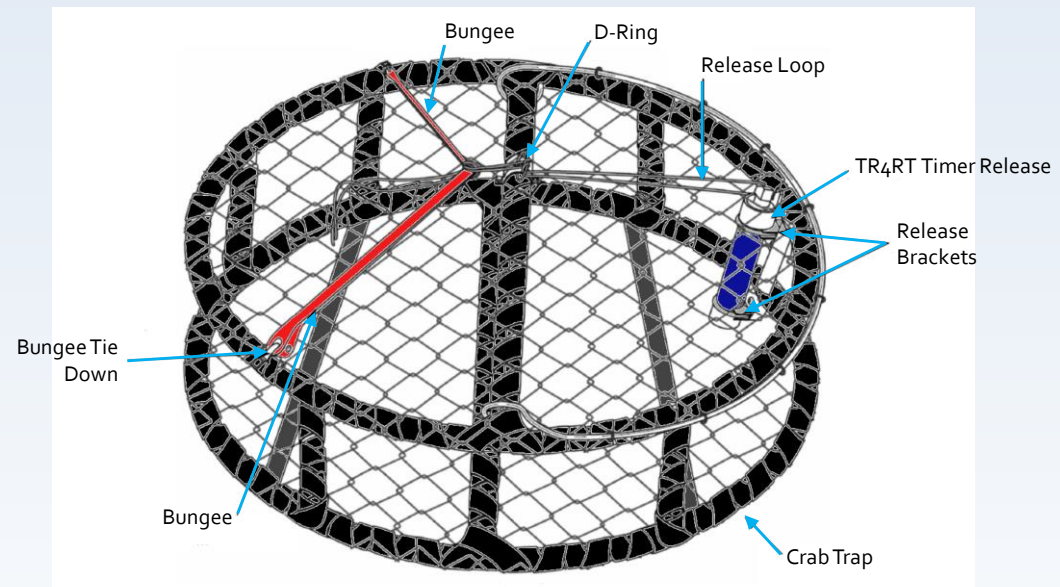
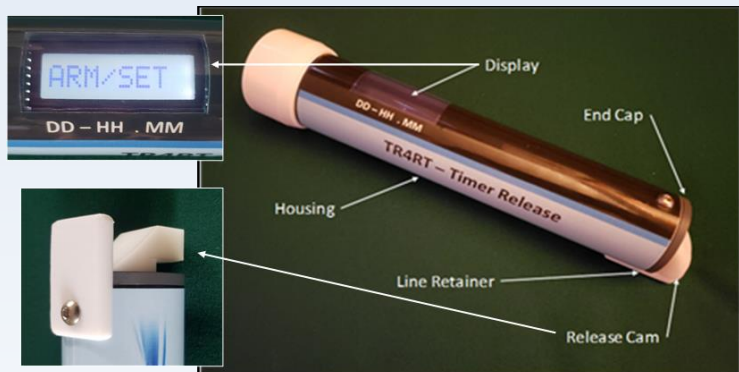


NMSF EFP Major Amendment Request, cont.

- EFP amendment requests:
 - Remove requirement to deploy gear with back up releases
 - Authorize up to 10 agents and vessels
 - Expand testing area northward to CA/Oregon border
 - Clarify Fiomarine Fiobuoy marking requirements
 - Allow testing of Sub Sea Sonics TR4RT and AR4RT systems
 - Allow testing of Ashored Innovations MOBI + ATLAS systems
 - Allow incorporation of NOAA-approved weak rope



Subsea Sonics TR4RT and AR4RT



Photos provided by Bart Chadwick



Ashored Innovations MOBI and ATLAS



Photos provided by applicant



NOAA-Approved Weak Rope

- Used with pop-up gear
- ~1700lb breaking strength, based on modeling for North Atlantic Right Whale

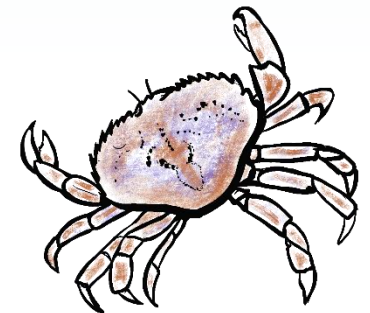




Proposed Special Conditions

(Specific changes to the proposed EFP project are marked with an asterisk* and are in ***bold italics***)

- Authorized agents and vessels that may participate in the project
- General requirements for valid commercial licenses, permits, and vessel registration
- Testing in rock crab or Dungeness crab fishery with appropriate permits
- ****Retention, possession, and landing of Dungeness crab when commercial fishery is open and during early closures under RAMP***
- Traps can be deployed at any time of year





Proposed Special Conditions, cont.

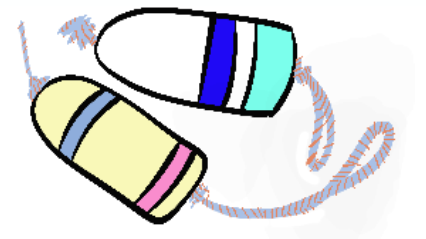
- Record EFP number and catch information, notify CDFW of landings
- Fishing area bounded by CA/Oregon border, Lopez Point, and the 100-fathom line
- ****Trawls with up to 10 traps connected by a common groundline***
- ****Per-vessel maximum of 150 traps/trip; remove cumulative limit***
- Gear specifications and marking requirements
- ****Gear servicing interval: 96 hours (all gear); for Galvanic Timed Releases, within 2 hours of selected release interval***





Proposed Special Conditions, cont.

- Electronic monitoring and pre-trip notification requirements
- Best practices for avoiding whale entanglement for conservation and management purposes
- ****Authorized agents to complete Level 1 entanglement response training before commencing at-sea testing***
- ****Data sharing requirements for research, management, and enforcement purposes***
- Lost gear recovery plan and reporting requirements





CDFW Recommendation

Approval of Major Amendment with proposed special conditions.

Thank You

Morgan Ivens-Duran, Environmental Scientist
Whale Safe Fisheries Project
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