

**Coastal and Puget Sound Shellfish Updates – (Briefing/Public Hearing)**

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## Summary

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<b>Meeting dates:</b>	September 28-30, 2023 – Yakima, WA / Virtual
<b>Agenda item:</b>	Coastal and Puget Sound Shellfish Updates - Briefing/Public Hearing
<b>Presenter(s):</b>	Heather Hall, Intergovernmental Ocean Policy Manager Aaron Dufault, Puget Sound Shellfish Manager

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### Background summary:

Since 2019, the Fish and Wildlife Commission has considered and adopted regulation changes intended to reduce the entanglement risk between marine mammals and coastal commercial Dungeness crab gear. WDFW staff are in the process of drafting a Conservation Plan (CP) for the coastal commercial Dungeness crab fishery which is the first step in submitting a request for an Endangered Species Act (ESA) Section 10 Incidental Take Permit (ITP) from the National Marine Fisheries Service (NMFS). Regulatory changes proposed here build on the foundation of monitoring and risk reduction measures already in place and align with CP objectives directed at reducing the risk of marine life entanglements in coastal Dungeness crab gear pursuant to federal ESA and Marine Mammal Protection Act (MMPA) requirements. Proposed changes to coastal commercial Dungeness crab fishery regulations include requiring an electronic monitoring system for all fishery participants. In addition, coastal and Puget Sound shellfish managers have worked together to propose changes to gear marking requirements for both coastal and Puget Sound shellfish fisheries that build on existing regulations for the coastal commercial Dungeness crab fishery which are needed to meeting monitoring requirements. Other proposed changes relate to fishing area, gear, and catch reporting and are intended to clarify existing regulations and improve management and enforcement capabilities. We've organized the proposed rule changes into two sections, entanglement monitoring and risk reduction measures and clarifications to existing shellfish rules.

## Entanglement Monitoring and Risk Reduction Measures

### Electronic Monitoring

#### Installation and Use of Electronic Monitoring (WAC 220-340-420)

This proposed rule would require all vessels participating in the coastal Dungeness crab fishery install and use an electronic monitoring (EM) system to record vessel location and the location of individual pots using hydraulic pressure sensor recordings. EM is necessary to ensure fishing is not occurring within closed areas, to monitor adherence to license-based and seasonal pot limits, and to collect spatial and temporal fishing data to inform management of the fishery, including addressing marine mammal interactions, particularly endangered humpback whales.

#### Coastal Commercial Crab Logbook – Not Required with Operational EM (WAC 220-340-460)

This proposed rule would eliminate the requirement for an operator in the coastal Dungeness crab fishery to maintain and submit a paper logbook when an EM system is installed and fully operational. This rule change would reduce the reporting burden on vessel operators.

### Gear Marking and Entanglement Monitoring

#### Line Marking in Coastal Dungeness Crab Fishery (WAC 220-340-430)

Prohibit Line Marks or Colors Required in Another Fishery (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520; 220-360-220)

Crab and Shrimp Buoys (WAC 220-330-020)

Limit Line in Shellfish and Hagfish Fisheries to Amount Needed (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520)

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## Require Annual Registration of Commercial Crab Buoy Color Schemes (WAC 220-340-430)

### Standardize Crab and Shrimp Pot Buoy Colors (WAC 220-330-020;220-340-520)

Gear marking requirements are proposed to enhance compliance with the MMPA and the ESA. Large whales and marine turtles are among those species most affected by fishing gear entanglements, and these animals are federally protected. To address entanglement cases with marine mammals where the entangling gear is visible but cannot be used to confidently confirm the associated fishery, the National Marine Fisheries Service has indicated that lines and buoys marked in a way that is unique to each fishery would aid in achieving compliance with the MMPA and ESA. Marking supports positive attribution of gear to the fishery. Attribution can be improved by prohibiting a fishery from using marks/line colors required in another fishery; other coastal states have implemented or intend to implement a similar rule. These proposed changes clarify the requirements for unique line marks or buoy colors for Washington fisheries that use line and buoys as part of the gear configuration. These proposed changes also support reducing the amount of fishing line in the water thereby reducing entanglement risk.

Proposed rule changes for buoy marking would align Puget Sound and coastal commercial Dungeness crab fishery requirements and specify that crab fishery participants must complete buoy registration annually using the WDFW online registration form. Existing rules require the creation and registration of a unique buoy color scheme for each commercial license but do not specify a frequency. The proposed change improves the process for registering buoy colors, creates a data source for enforcement, and advances efforts to further improve gear marking and aid in achieving compliance with the MMPA and ESA.

## Clarifications to Existing Shellfish Rules

### Define a New Management Category for Non-spot Shrimp Species (WAC 220-320-015)

Proposed rule changes would define a new management “non-spot shrimp” or pandalid complex to include shrimp species other than spot shrimp. This rule proposal simplifies regulatory language, supporting improved compliance and enforcement.

### Buoy Tags in Commercial Dungeness Crab Fisheries (WAC 220-340-430)

Proposed rule changes would cap the number of buoy tags issued in the Puget Sound commercial crab fishery, limit the number of potential pots deployed to the current maximum pot limit of 100 per license, with no pot replacement. The proposed rule changes also streamline the reporting of derelict gear and issuance of replacement tags for commercial users, reduce waste, and reduce the possibility of issuing of a buoy tag for the wrong fishery.

### Puget Sound Commercial Pot Shrimp (WAC 220-340-520)

The proposed rule change clarifies that the pot limit for commercial shrimp pot fisheries in Puget Sound are based on the fishery and gear type and are not per license limit. Additionally, the changes would limit fishing depth and align the rule with revised electronic fish ticket rules.

### Puget Sound Commercial Crab and Shrimp Fishery Boundary Designations (WAC 220-320-120; 220-320-140; 220-340-455; 220-340-530)

Proposed rule changes would update Puget Sound commercial crab and shrimp fishery boundary designations. The purpose of the changes is to correct outdated boundary designations and add specially designated fishing areas.

### Shellfish Harvest Logs (WAC 220-340-030)

Proposed rule changes would correct and update logbook reporting requirements for Puget Sound and coastal commercial shellfish fisheries where logs are required by defining some rule elements separately either by fishery or region (i.e., Puget Sound or coast) and by deleting unnecessary requirements. The changes are needed to clarify rule language and align rule language with the implementation of mandatory electronic fish tickets and electronic monitoring.

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Fish Receiving, Transportation Ticket, and Quick Reporting Revisions (WAC 220-352-060; 220-352-230; 220-352-340; 220-340-420)

Proposed rule changes would describe when and where electronic fish tickets must be submitted to the department, including provisions for when access to cellular broadband is not immediately available when the fish ticket is completed. The proposed changes would clarify applicability of transportation ticket requirements by including “shellfish” in the rule and improve transportation ticket information by requiring the WDFW-issued vessel identification number and date of harvest, clarify transportation ticket requirements for crab removed from the vessel prior to landing in Puget Sound. Proposed rule changes clarify stored crab reporting and timeframe, and sale reporting for stored crab.

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**Policy issue(s) you are bringing to the Commission for consideration:**

Proposed rule changes would make it mandatory for all vessels participating in the coastal Dungeness crab fishery to purchase, install, and maintain an electronic monitoring system that will record vessel location and the location of all pots hauled. This change is needed to enable the collection of more accurate and timely fishing information which will WDFW’s ability to ensure fishing is not occurring in close areas, confirm that participants are not fishing before the opening of the crab season, confirm adherence to pot limits and gather additional information that may aid in identifying instances of gear tampering. Implementation of electronic monitoring systems comes at a cost to participants.

The proposed rule changes build on and improve regulations intended to reduce the risk of coastal commercial crab gear becoming entangled with marine mammals, including humpback whales which are listed under the Endangered Species Act. Standardized gear marking requirements will increase visibility in marine mammal entanglements and aid in attributing entanglements to a specific fishery.

Additional changes to coastal commercial Dungeness crab rules are necessary to provide clarity to existing rule language that describes the pre-season gear set period and clarifies season opening provisions if the season is delayed due to biotoxins.

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**Public involvement process used and what you learned:**

A letter summarizing proposed changes and opportunities for public comment was distributed to all coastal and Puget Sound shellfish dealers and license holders in August 2023. WDFW has an active coastal Dungeness crab Advisory Board and a newly formed Puget Sound Commercial Crab Advisory Board.

The Puget Sound Commercial Crab Advisory Board was briefed on the scope of rulemaking changes on 9/11/23 and interested parties were asked to provide their feedback via the public comment link.

Changes to coastal Dungeness crab regulations were developed with input from the Advisory Board and a larger group of industry members, stakeholders, and coastal Dungeness crab license holders. WDFW has received valuable feedback on the proposal to implement electronic monitoring through coordination during a pilot EM project. The pilot project provided participants in the coastal commercial crab fishery with electronic monitoring systems with capabilities as proposed here to test during normal fishing operations. WDFW staff met with coastal crab advisors and industry representatives several times in 2022 and 2023. In the late summer and early fall of 2022, WDFW hosted a series of three industry meetings to provide updates on the EM pilot project and new information on gear marking. WDFW held a follow-up meeting in May of 2023 as proposed EM rule language was being developed and another meeting on August 17, 2023, to provide an overview of the proposed rule changes once they were available for public comment. Information on these meetings, including meeting materials can be found on the coastal commercial Dungeness crab webpage:

<https://wdfw.wa.gov/fishing/commercial/crab/coastal/letters-notices#general-info>.

The most input we've received with the proposed rule changes are around the EM requirement. Some key questions and concerns are highlighted below.

**New Technology.** Several comments during public meetings were focused on new technology and uncertainty with how new regulations will be enforced, particularly during the first year of the new requirement. In response, proposed regulations allow fishery participants to receive an exemption permit for a system failure that allows the fishery participant to continue fishing while seeking technical support. Exemption permits can be extended if issues are persistent. EM program staff are working with IT to develop a smooth process for providing exemption permits when needed. In addition, WDFW staff are considering whether the current requirement to receive a confirmation after resuming fishing following a system interruption is needed.

**Video Component.** Some industry members provided strong support for an EM system with that includes video suggesting that this would improve the ability to enforce gear tampering issues. In response, WDFW extended the pilot project to test video on two vessels. During this time staff identified significant questions about including video that we can't satisfactorily answer at this time, but staff is willing to dig into the questions and keep the idea on the table for the future.

**Cost.** Some comments have been associated with the cost of EM. A Small Business Economic Impact Statement was completed for the EM component of the proposed rules and confirmed the cost of EM is more than minor and the impact will be greater on small businesses. EM systems without video are significantly less expensive than the system proposed in this rule making and provide a reasonable starting point for initial implementation. WDFW staff are working with our partners at Pacific States Marine Fisheries Commission to secure funding to offset costs associated with the purchase of EM systems. In addition, WDFW has submitted a Saltonstall-Kennedy grant pre-proposal to secure funds to reimburse license holders for the cost of EM system purchases.

**Hydraulic Pressure Sensor.** During stakeholder meetings it was suggested that the placement of the hydraulic pressure sensor should be included in the regulations to prevent someone from placing the sensor in a way that bypasses the data collection. This requirement was included in the proposed regulations but may need revisions to better reflect vessel operations.

**Continuous Operation.** The proposed regulations require the EM system operates continuously however we have learned that some small vessels may not have shore-based power. WDFW staff are exploring the issue and alternatives.

**Other.** Input on gear marking has been focused on a request for clarity in the current regulations for line marking in the coastal Dungeness crab fishery, the proposed changes are intended to provide that clarity. Other input specific to line marking has been related to a future proposal to consider state and fishery specific manufactured line as a long-term line marking option. Aside from the considerable cost to implement this change, the general idea has been well received by fishery participants. WDFW staff are working with state and federal fishery managers to coordinate this approach across the West Coast and with NMFS Protected Resources staff on line marking criteria. Staff will begin a focused effort to coordinate with fishery participants to explore details related to fishing operations to inform future rule proposals.

WDFW will consider all public input throughout the comment period and will report on those at the Commission meeting in October.

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**Action requested:**

No action, briefing and public comment only.

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**Draft motion language:**

N/A

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**Justification for Commission action:**

N/A

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**Communications Plan:**

In addition to discussing these proposals during advisory group meetings, all coastal and Puget Sound shellfish dealers and all coastal Dungeness crab license holders received a letter describing the proposed rule changes. Public comment is open through October 2<sup>nd</sup> and a public hearing will be held at the time of the Commission briefing on September 29<sup>th</sup>. WDFW staff will summarize public comment provided prior to the Commission meeting as part of the briefing with additional responses provided when the Commission takes final action.

WDFW staff will continue to build outreach materials and engage with shellfish harvesters and dealers during the final phase of the development of the mobile application for electronic fish ticket reporting this fall.

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*Form revised 12/5/12*







# PROPOSED RULE MAKING

## CR-102 (July 2022) (Implements RCW 34.05.320) Do NOT use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER  
STATE OF WASHINGTON  
FILED

DATE: July 26, 2023

TIME: 8:48 AM

WSR 23-16-050

Agency: Washington Department of Fish and Wildlife (P2023-10)

Original Notice

Supplemental Notice to WSR \_\_\_\_\_

Continuance of WSR \_\_\_\_\_

Preproposal Statement of Inquiry was filed as WSR 23-10-081 on May 2, 2023 ; or

Expedited Rule Making--Proposed notice was filed as WSR \_\_\_\_\_; or

Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or

Proposal is exempt under RCW \_\_\_\_\_.

Title of rule and other identifying information: (describe subject) Amending coastal and Puget Sound recreational and commercial fixed gear fishery and implementing electronic monitoring for the coastal commercial Dungeness crab fishery.

Hearing location(s):

Date:	Time:	Location: (be specific)	Comment:
September 28-30, 2023	8:00 AM	Yakima Convention Center 10 N 8th St Yakima, WA 98901 (in-person and online)	Visit our website at <a href="https://wdfw.wa.gov/about/commission/meetings">https://wdfw.wa.gov/about/commission/meetings</a> or contact the Commission office at (360) 902-2267 or email: <a href="mailto:commission@dfw.wa.gov">commission@dfw.wa.gov</a> for instructions on how to join the meeting.

Date of intended adoption: October 26-28, 2023 (Note: This is NOT the effective date)

Submit written comments to:

Name: Heather Hall

Address: Post Office Box 43200  
Olympia, Washington 98501

Email: [crab-and-shellfish-rulemaking@PublicInput.com](mailto:crab-and-shellfish-rulemaking@PublicInput.com)

Fax:

Other: Website: <https://publicinput.com/crab-and-shellfish-rulemaking> Phone number for comments: 855-9252801  
project code: 2872

By (date) October 2, 2023

Assistance for persons with disabilities:

Contact Title VI/ADA Compliance Coordinator

Phone: (360) 902-2349

Fax:

TTY: 1-800-833-6388 OR 711

Email: [Title6@dfw.wa.gov](mailto:Title6@dfw.wa.gov)

Other:

By (date) September 18, 2023

Purpose of the proposal and its anticipated effects, including any changes in existing rules:

The proposed changes to regulations include both non-administrative and administrative amendments. The non-administrative changes are presented first followed by administrative changes. Each of the amended rules and their specific changes are listed below:

### Non-Administrative

#### Installation and Use of Electronic Monitoring (WAC 220-340-420)

Proposed rule changes would require the installation and use of an electronic monitoring (EM) system on vessels participating in Washington's non-tribal coastal commercial Dungeness crab fishery. The EM system is a tool that enables the collection of more accurate and timely fishing information thereby improving WDFW's ability to ensure fishing is not occurring within closed areas, confirm that participants are not fishing before the opening of the crab season, confirm adherence to license-based or seasonal pot limits, and gather additional information that may aid in identifying instances of gear tampering.

**Coastal Commercial Crab Logbook – Not Required with Operational EM (WAC 220-340-460)**

Proposed rule changes would eliminate the requirement for an operator in the coastal Dungeness crab fishery to maintain a paper logbook when an EM system is installed and fully operational on the vessel. A paper logbook would only be required when an EM system has failed. The effect of this change is to reduce the reporting burden on vessel operators.

**Line Marking in Coastal Dungeness Crab Fishery (WAC 220-340-430)**

Proposed rule changes would specify that line-marking must be sufficient to identify it as being exclusive to the coastal Dungeness crab fishery and that the two 12-inch red marks, an existing line-marking requirement for coastal Dungeness crab fishery participants, be continuous. These proposed changes standardize line markings in the coastal Dungeness crab fishery and clarify that the line itself is to be marked for the full extent of the 12-inch span. These changes advance the intended purpose of line-marking to increase gear visibility in marine mammal entanglements and thus fishery attribution.

**Prohibit Line Marks or Colors Required in Another Fishery (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520; 220-360-220)**

Proposed rule changes would prohibit the use of line marks or color combinations in Washington fixed gear fisheries that are required for other state or federal fisheries. The effect of the proposed rule changes is to disallow fishers that currently do not and are not required to mark the fishing line from the marking line in a manner that is consistent with another fishery and to further support fishery-specific attribution of line in marine mammal entanglements.

**Crab and Shrimp Buoys (WAC 220-330-020)**

Proposed changes would allow buoys to be submerged by a director-issued permit in personal use (i.e., recreational) fisheries.

**Limit Line in Shellfish and Hagfish Fisheries to Amount Needed (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520)**

Proposed rule changes would allow no more than the amount of line required to compensate for tides, currents, and weather in commercial and recreational fisheries for Dungeness crab and shrimp, and commercial hagfish. The change is necessary to standardize and implement fishing best practices consistent with reducing gear entanglements with marine mammals.

**Standardize Crab and Shrimp Pot Buoy Colors (WAC 220-330-020;220-340-430;220-340-520)**

Proposed rule changes would standardize and clarify buoy colors for recreational and commercial crab and shrimp pot gear. These changes standardize that buoys in the Puget Sound and coastal commercial crab fisheries may not be both red and white unless at least 30 percent of the buoy is marked in additional color(s). The proposed rule changes clarify that for commercial shrimp fisheries in Puget Sound, buoy color, already required to be orange, must be *solid* orange and for Puget Sound recreational shrimp pots, already required to be yellow, must be *solid* yellow. These proposed changes are consistent with the intent to support attribution of marine mammal entangled gear to a specific fishery.

***Administrative Rule Changes***

**Define a New Management Category for Non-spot Shrimp Species (WAC 220-320-015)**

Proposed rule changes would define a new management “non-spot shrimp” or pandalid complex to include shrimp species other than spot shrimp. The purpose for the change is to eliminate the need to list each non-spot shrimp species individually thereby improving the clarity and brevity of the rule.

**Require Annual Registration of Commercial Crab Buoy Color Schemes (WAC 220-340-430)**

Proposed rule changes would align Puget Sound and coastal commercial Dungeness crab fishery requirements and specify that crab fishery participants must complete buoy registration annually using the WDFW online registration form. Existing rules require the creation and registration of a unique buoy color scheme for each commercial license but do not specify a frequency.

**Buoy Tags in Commercial Dungeness Crab Fisheries (WAC 220-340-430)**

Proposed rule changes would cap the number of buoy tags issued in the Puget Sound commercial crab fishery, limit the number of potential pots deployed to the current maximum pot limit of 100 per license, with no pot replacement. The proposed rule changes also streamline the reporting of derelict gear and issuance of replacement tags for commercial users, reduce waste, and reduce the possibility of issuing of a buoy tag for the wrong fishery.

**Puget Sound Commercial Pot Shrimp (WAC 220-340-520)**

Proposed rule changes would clarify that the pot limit for commercial shrimp pot fisheries in Puget Sound are based on the fishery and gear type and are not per license limit. Additionally, the changes would limit fishing depth and align the rule with revised electronic fish ticket rules.

**Puget Sound Commercial Crab and Shrimp Fishery Boundary Designations (WAC 220-320-120; 220-320-140; 220-340-455; 220-340-530)**

Proposed rule changes would update Puget Sound commercial crab and shrimp fishery boundary designations. The purpose of the changes is to correct outdated boundary designations and add specially designated fishing areas.

**Shellfish Harvest Logs (WAC 220-340-030)**

Proposed rule changes would correct and update logbook reporting requirements for Puget Sound and coastal commercial shellfish fisheries where logs are required by defining some rule elements separately either by fishery or region (i.e., Puget Sound or coast) and by deleting unnecessary requirements. The changes are needed to clarify rule language and align rule language with the implementation of mandatory electronic fish tickets and electronic monitoring.

**Fish Receiving, Transportation Ticket, and Quick Reporting Revisions (WAC 220-352-060; 220-352-230; 220-352-340; 220-340-420)**

Proposed rule changes would describe when and where electronic fish tickets must be submitted to the department, including provisions for when access to cellular broadband is not immediately available when the fish ticket is completed. The proposed changes would clarify applicability of transportation ticket requirements by including "shellfish" in the rule and improve transportation ticket information by requiring the WDFW-issued vessel identification number and date of harvest, clarify transportation ticket requirements for crab removed from the vessel prior to landing in Puget Sound. Proposed rule changes clarify stored crab reporting and timeframe, and sale reporting for stored crab.

**Reasons supporting proposal:** : The adoption of these proposed rules will enhance fishery monitoring and clarify existing rules. Overall, these rule amendments will accomplish conservation objectives, advance achieving orderly fisheries, and improve the enforceability of current rules.

***Non-Administrative***

**Installation and Use of Electronic Monitoring (WAC 220-340-420); Coastal Commercial Crab Logbook – Not Required with Operational EM (WAC 220-340-460)**

The EM system is necessary to ensure fishing is not occurring within closed areas, to monitor adherence to license-based and seasonal pot limits, and to collect spatial and temporal fishing data to inform management of the fishery, including addressing marine mammal interactions, particularly endangered humpback whales.

WDFW co-manages the non-tribal coastal commercial Dungeness crab fishery with the Tribal governments whose usual and accustomed (U&A) fishing grounds are located on the outer coast of Washington state. As a co-manager of the fishery, WDFW must ensure accurate reporting of where and when state-licensed fishermen are fishing, and that non-Tribal fishery participants do not cross into areas that are reserved for Tribal fishing only. WDFW must also implement actions to reduce the entanglement of whales in Dungeness crab fishing gear. The EM system will more accurately identify the locations in which fishing gear is deployed thereby improving data inputs to models that estimate or predict the distribution and likelihood of co-occurrence. With this collected data, WDFW could consider management measures to reduce the amount of gear that could be deployed in areas of concern. Finally, implementation of EM systems will improve WDFW's ability to manage the fishery with respect to biotoxins (particularly domoic acid). With EM systems in place, WDFW would have the ability to manage biotoxin events using area closures to prohibit the fishery in discrete areas affected by biotoxins. Like other area management needs, the EM system ensures fishing around biotoxin restricted areas is enforceable and protects public health.

**Line Marking in Coastal Dungeness Crab Fishery (WAC 220-340-430); Prohibit Line Marks or Colors Required in Another Fishery (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520; 220-360-220); Crab and Shrimp Buoys (WAC 220-330-020); Limit Line in Shellfish and Hagfish Fisheries to Amount Needed (WAC 220-330-020; 220-340-430; 220-340-510; 220-340-520); Standardize Crab and Shrimp Pot Buoy Colors (WAC 220-330-020;220-340-520)**

These regulatory changes enhance compliance with the Marine Mammal Protection Act and the Endangered Species Act. Large whales and marine turtles are among those species most affected by fishing gear entanglements, and these animals are federally protected. To address entanglement cases with marine mammals where the entangling gear is visible but cannot be used to confidently confirm the associated fishery, the National Marine Fisheries Service has indicated that lines and buoys marked in a way that is unique to each fishery would aid in achieving compliance with the MMPA and ESA. Marking supports positive attribution of gear to the fishery. Attribution can be improved by prohibiting a fishery from using marks/line colors required in another fishery; other coastal states have implemented or intend to implement a similar rule. These proposed changes to the rules clarify the requirements for unique line marks or buoy colors for Washington fisheries that use line and buoys as part of the gear configuration. These proposed changes also support reducing the amount of fishing line in the water thereby reducing entanglement risk.

**Administrative Rule Changes**

To effectively manage commercial and recreational shellfish fisheries, WDFW utilizes a variety of management measures relating to fishing area, gear, and catch reporting. As part of the proposed rule package, to improve management and enforcement capabilities, WDFW is also proposing administrative rule changes for coastal and Puget Sound recreational and commercial shellfish fisheries.

**Define a New Management Category for Non-spot Shrimp Species (WAC 220-320-015)**

This rule proposal simplifies regulatory language, supporting improved compliance and enforcement.

**Require Annual Registration of Commercial Crab Buoy Color Schemes (WAC 220-340-430)**

The rule change to require annual registration would ensure commercial buoy color schemes remain unique to each license and records are up to date such that lost or entangled gear can be associated with the owner. This rule change improves current buoy color registration practices and incorporates the use of an electronic buoy registration form to ensure that licensed harvesters are compliant with conservation plan requirements. The rule change proposal would also create a data source for enforcement to identify gear with gear owners. The rule change would advance efforts to further improve gear marking and aid in achieving compliance with the MMPA and ESA.

**Buoy Tags in Commercial Dungeness Crab Fisheries (WAC 220-340-430;)**

The proposed rule changes streamline the reporting of derelict gear and issuance of replacement tags for commercial users, reduce waste and costs by limiting the number of replacement tags that can be obtained, and minimizes the possibility of issuing of a buoy tag for use in the wrong fishery.

**Puget Sound Commercial Pot Shrimp (WAC 220-340-520)**

The proposed rule change implements depth restrictions to limit interaction with non-target species in the non-spot shrimp fishery per Puget Sound co-manager shellfish agreements.

**Puget Sound Commercial Crab and Shrimp Fishery Boundary Designations (WAC 220-320-120; 220-320-140; 220-340-455; 220-340-530)**

The proposed rule changes provide improved guidance for commercial harvesters and dealer/buyers, aiding compliance.

**Shellfish Harvest Logs (WAC 220-340-030)**

The proposed rule changes provide improved guidance for commercial harvesters and dealer/buyers, aiding compliance.

**Fish Receiving, Transportation Ticket, and Quick Reporting Revisions (WAC 220-352-060; 220-352-230; 220-352-340; 220-340-420)**

The proposed rule changes provide improved guidance for commercial harvesters and dealer/buyers, aiding compliance.

**Statutory authority for adoption:** RCWs 77.04.012, 77.04.013, 77.04.055, 77.12.045, and 77.12.047

**Statute being implemented:** RCWs 77.04.012, 77.04.013, 77.04.055, 77.12.045, and 77.12.047

**Is rule necessary because of a:**

- Federal Law?  Yes  No
- Federal Court Decision?  Yes  No
- State Court Decision?  Yes  No

If yes, CITATION:

**Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:**

**Type of proponent:**  Private  Public  Governmental

**Name of proponent:** (person or organization) Washington Department of Fish and Wildlife

**Name of agency personnel responsible for:**

	Name	Office Location	Phone
Drafting:	Lorna Wargo	1111 Washington St. SE, Olympia, WA	360.581.5611
Implementation:	Coast – Matt George; Puget Sound – Katelyn Bosley	Coastal – 48 Devonshire Road, Montesano, WA 98563; Puget Sound – 375 Hudson St, Port Townsend, WA 98368	360.249.4648; 360.302.3030
Enforcement:	Chief Steve Bear	1111 Washington St. SE, Olympia, WA	360.902.2373

Is a school district fiscal impact statement required under [RCW 28A.305.135](#)?

Yes  No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name:

Address:

Phone:

Fax:

TTY:

Email:

Other:

Is a cost-benefit analysis required under [RCW 34.05.328](#)?

Yes: A preliminary cost-benefit analysis may be obtained by contacting:

Name:

Address:

Phone:

Fax:

TTY:

Email:

Other:

No: Please explain: Under RCW 34.05.328 (5), a cost-benefit analysis is not required for this rule as DFW is not implementing RCW 77.55 with this rule

### Regulatory Fairness Act and Small Business Economic Impact Statement

Note: The [Governor's Office for Regulatory Innovation and Assistance \(ORIA\)](#) provides support in completing this part.

#### (1) Identification of exemptions:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see [chapter 19.85 RCW](#)). For additional information on exemptions, consult the [exemption guide published by ORIA](#). Please check the box for any applicable exemption(s):

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.061](#) because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by [RCW 34.05.313](#) before filing the notice of this proposed rule.

This rule proposal, or portions of the proposal, is exempt under the provisions of [RCW 15.65.570](#)(2) because it was adopted by a referendum.

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(3). Check all that apply:

[RCW 34.05.310](#) (4)(b)

(Internal government operations)

[RCW 34.05.310](#) (4)(e)

(Dictated by statute)

[RCW 34.05.310](#) (4)(c)

(Incorporation by reference)

[RCW 34.05.310](#) (4)(f)

(Set or adjust fees)

[RCW 34.05.310](#) (4)(d)

(Correct or clarify language)

[RCW 34.05.310](#) (4)(g)

((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025](#)(4) (does not affect small businesses).

This rule proposal, or portions of the proposal, is exempt under RCW \_\_\_\_\_.

Explanation of how the above exemption(s) applies to the proposed rule:

#### (2) Scope of exemptions: *Check one.*

The rule proposal is fully exempt (*skip section 3*). Exemptions identified above apply to all portions of the rule proposal.

The rule proposal is partially exempt (*complete section 3*). The exemptions identified above apply to portions of the rule proposal, but less than the entire rule proposal. Provide details here (consider using [this template from ORIA](#)):

The rule proposal is not exempt (*complete section 3*). No exemptions were identified above.

**(3) Small business economic impact statement:** Complete this section if any portion is not exempt.

If any portion of the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

No Briefly summarize the agency's minor cost analysis and how the agency determined the proposed rule did not impose more-than-minor costs. \_\_\_\_\_

Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses and a small business economic impact statement is required. Insert the required small business economic impact statement here:  
An evaluation by WDFW determined that the rule requirement of the EM system is the only element that would result in costs to businesses. The other elements of the rule package are not expected to result in costs to businesses. Therefore, this evaluation of whether the proposed rule is likely to result in more than minor costs is focused on the EM system requirement of the rule proposal. Based on a range of annual revenues in the coastal Dungeness crab fishery, the analysis estimates a minor cost threshold of between \$450 and \$1,500 for affected businesses. The likely cost of complying with the proposed rule ranges from \$1,830 to \$2,045. As the businesses in the coastal commercial Dungeness crab fishery are almost exclusively small businesses (fewer than 50 employees), this analysis finds that the proposed rule would have a disproportionate cost impact on small businesses. The Department has provided significant opportunities for stakeholder input during the development of the proposed rulemaking in over a period of four years. Based on stakeholder input, potential mitigation options to defray the costs to small businesses were identified. These include the cessation of the logbook requirements, allowing flexibility in the type of the EM unit purchased, coordinating EM unit purchases to take advantage of bulk pricing, and allowing fishermen to revert to use of paper logbooks in cases of EM system malfunction.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

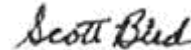
Name: Lorna Wargo  
Address: 1111 Washington St. SE, Olympia, WA  
Phone: 360.581.5611  
Fax:  
TTY:  
Email: Lorna.Wargo@dfw.wa.gov  
Other:

**Date:** 7/26/2023

**Name:** Scott Bird

**Title:** Agency Rules Coordinator

**Signature:**



NEW SECTION

**WAC 220-320-015 Definitions—Shellfish species complexes.** "Non-spot shrimp" are defined as a species complex composed of the following species of pandalid shrimp classified in WAC 220-320-010: Dock shrimp (*Pandalus danae*), coonstripe shrimp (*Pandalus hypsinotus*), humpy shrimp (*Pandalus goniurus*), Ocean pink shrimp (*Pandalus jordani*), pink shrimp (*Pandalus eous*), and side stripe shrimp (*Pandalus (Pandalopsis) dispar*).

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

**WAC 220-320-120 Puget Sound Crustacean (crab and shrimp) Special Management Areas.** The following areas shall be defined as Puget Sound Crustacean (crab and shrimp) Special Management Areas (CSMA):

(1) Discovery Bay:

(a) Crustacean Special Management Area: All waters of Marine Fish-Shellfish Management and Catch Reporting Area 25E - Discovery Bay south of a line from Diamond Point (48.0945°, -122.9152°) to Cape George (48.1034°, -122.8847°).

(b) Shrimp District: All waters of Catch Area 25E and those waters of Catch Area 25A south of a line from McCurdy Point (48.1358°, -122.8374°) on the Quimper Peninsula to the northern tip of Protection Island (48.1327°, -122.9285°), then to Rocky Point (48.0964°, -122.9754°) on the Miller Peninsula.

(2) Dungeness Bay CSMA: All waters of Dungeness Bay west of the (~~(-123.1010°)~~) -123.1103° (123°06.6') longitude line originating from the New Dungeness Light (48.1818°, -123.1103°) (~~(extending southward to the cul-de-sac at the end of 3 Crabs Road on the mainland (48.1509°, -123.1212°))~~)).

(3) Everett Flats CSMA: That portion of Catch Area 26A-E (see WAC 220-320-110) east of a line from western edge of Howarth Park (47.9619°, -122.2441°) true north to the southern tip of Gedney (Hat) Island (48.0048°, -122.3060°) and that portion of 24B east of a line from the northern tip of Gedney (Hat) Island (48.0215°, -122.3274°) to Camano Head (48.0570°, -122.3580°) and south of a line drawn from Camano Head to Hermosa Point (48.0620°, -122.2935°) on the Tulalip reservation.

(4) Port Angeles Harbor CSMA: That portion of Marine Fish-Shellfish Catch Area 23D west of a line from the Ediz Hook Light (48.1400°, -123.4025°) to the site of the ITT Rayonier Dock (48.1169°, -123.4083°).

(5) Port Townsend Bay CSMA: Those waters of Marine Fish-Shellfish Management and Catch Reporting Area 25D within a line projected from the Point Hudson Marina entrance to the northern tip of Indian Island (48.0853°, -122.7303°), thence to Kala Point (48.0575°, -122.7674°) and thence following the shoreline to the point of origin.

(6) Sequim Bay CSMA: All waters of Sequim Bay south of Travis Spit and a line west from the western tip of Travis Spit (Klapot Point) to the dock at the Pacific Northwest National Laboratory (48.0793°, -123.0452°).

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

**WAC 220-320-140 Commercial shrimp geographical management units —Puget Sound.** Puget Sound commercial shrimp harvest management utilizes a hierarchy of geographical management units consisting of region, subregion, Marine Fish-Shellfish Management and Catch Reporting Area (catch area), and subarea. This section defines these units.



**(1) The following areas are defined as Puget Sound Shrimp Management Regions and subregions:**

(a) Region 1 - Trawl fishery: All waters of Catch Areas 20A, 20B, 21A, 21B, 22B, and 22A;

Region 1 - Pot fishery: All waters of Catch Areas 20A, 20B, 21A, 21B, 22B, and Catch Area 22A, except the southwesterly portion of Catch Area 22A south of a line true west from Lime Kiln Point Light (48.5159°, -123.1525°) on San Juan Island to the International Boundary, then south of the shoreline of San Juan Island from Lime Kiln Point Light to Cattle Point (48.4501°, -122.9636°), then south of a line from Cattle Point to Davis Point (48.4559°, -122.9355°) on Lopez Island, and south of the shoreline of Lopez Island from Davis Point to Point Colville (48.4217°, -122.8131°; see (d) of this subsection—Region 3).

(i) Subregion 1A: All waters of Catch Area 20B west of a line from Point Doughty (48.7117°, -122.9492°) on Orcas Island to the bell buoy (48.7649°, -123.0145°) at the International Boundary and all waters of Catch Area 22A west of a line projected true north and south from the western tip of Crane Island (48.5975°, -123.0078°), west of a line projected from the number 4 marker (48.5223°, -122.9173°) at the entrance to Fisherman Bay to the southern tip of Shaw Island (48.5466°, -122.9487°), and north of a line true west from Lime Kiln Point Light (48.5159°, -123.1525°) on San Juan Island to the International Boundary.

(ii) Subregion 1B: All waters of Catch Area 20B east of a line from Point Doughty (48.7117°, -122.9492°) on Orcas Island to the bell buoy at the International Boundary (48.7649°, -123.0145°), and waters of Catch Area 22A east of a line projected true north and south from the western tip of Crane Island (48.5975°, -123.0078°), east of a line projected from the number 4 marker (48.5223°, -122.9173°) at the entrance to Fisherman Bay to the southern tip of Shaw Island (48.5466°, -122.9487°), and east of a line projected true south from Point Colville (48.4217°, -122.8131°), and all waters of Catch Area 21A north and west of a line from the southern tip of Sinclair Island (48.6097°, -122.6572°) to Carter Point (48.6404°, -122.6088°) at the southern tip of Lummi Island.

(iii) Subregion 1C: All waters of Catch Areas 20A, 21B, 22B, and those waters of Catch Area 21A not included in Subregion 1B.

(b) Region 2-East (2E): All waters of Catch Areas 24A, 24B, 24C, 24D, and Subarea 26A-E (east; subareas defined in subsections (2) and (3) of this section).

(c) Region 2-West (2W): Waters of Catch Areas 25B, 25C, 25D, and Subarea 26A-W (west).

(d) Region 3 - Trawl fishery: All waters of Catch Areas 23A, 23B, 23C, 23D, 25A, 25E, and 29.

Region 3 - Pot fishery: All waters of Catch Areas 23A, 23B, 23C, 23D, 25A, 25E, 29, and the southwesterly portion of Catch Area 22A south of a line true west from Lime Kiln Point Light (48.5159°, -123.1525°) on San Juan Island to the International Boundary, then south of the shoreline of San Juan Island from Lime Kiln Point Light to Cattle Point (48.4501°, -122.9636°), then south of a line from Cattle Point to Davis Point (48.4559°, -122.9355°) on Lopez Island, and south of the shoreline of Lopez Island from Davis Point to Point Colville (48.4217°, -122.8131°).

(e) Region 4: All waters of Catch Area 26C and 26B, which is divided into Subareas 26B-1 and 26B-2 (subareas defined in subsection (2) of this section).

(f) Region 5: All waters of Catch Areas 27A, 27B, and 27C.

(g) Region 6: All waters of Catch Areas 26D, 28A, 28B, 28C, and 28D.

(2) **The following areas are defined as Puget Sound Commercial Shrimp Subareas, shrimp pot harvest:** For purposes of Puget Sound shrimp pot harvest allocation, fishing season, and catch reporting, catch areas (WAC 220-301-040) are modified as follows:

(a) That portion of Catch Area 22A south of a line true west from Lime Kiln Point Light (48.5159°, -123.1525°) on San Juan Island to the International Boundary, then south of the shores of San Juan Island from Lime Kiln Point Light to Cattle Point (48.4501°, -122.9636°), then south of a line from Cattle Point to Davis Point on Lopez Island (48.4559°, -122.9355°), and south of the shoreline of Lopez Island from Davis Point to Point Colville (48.4217°, -122.8131°) shall be considered to be part of Catch Area 23A.

(b) Catch Area 23A is divided into four subareas:

(i) Subarea 23A-E (east): All waters of Catch Area 23A east of -122.9500° (122°57'W) longitude and north of 48.3750° (48°22.5'N) latitude.

(ii) Subarea 23A-W (west): All waters of Catch Area 23A west of -122.9500° (122°57'W) longitude and north of 48.3750° (48°22.5'N) latitude.

(iii) Subarea 23A-C (central): All waters of Catch Area 23 south of 48.3750° (48°22.5'N) latitude and east of a line projected 335° true from the New Dungeness Lighthouse (48.1818°, -123.1103°).

(iv) Subarea 23A-S (south): All waters of Catch Area 23A west of a line projected 335° true from the New Dungeness Lighthouse (48.1818°, -123.1103°).

(c) Catch Area 26A is divided into two subareas:

(i) Subarea 26A-E (east): All waters of Catch Area 26A north and east of a line projected 110° true from the southern tip of Possession Point (47.9061°, -122.3846°) on Whidbey Island to the shipwreck located 0.8 nautical miles north of Picnic Point (47.8931°, -122.3286°) on the opposite shore.

(ii) Subarea 26A-W (west): All waters of Catch Area 26A south and west of a line projected 110° true from the southern tip of Possession Point (47.9061°, -122.3846°) on Whidbey Island to the shipwreck located 0.8 nautical miles north of Picnic Point (47.8931°, -122.3286°) on the opposite shore.

(d) Catch Area 26B is divided into two subareas:

(i) Subarea 26B-1: All waters of Catch Area 26B westerly of a line projected from West Point (47.6619°, -122.4348°) to Alki Point (47.5763°, -122.4199°).

(ii) Subarea 26B-2: All waters easterly of a line projected from West Point (47.6619°, -122.4348°) to Alki Point (47.5763°, -122.4199°).

(3) **The following areas are defined as Puget Sound Shrimp Subareas, shrimp trawl harvest:** For the purpose of Puget Sound shrimp trawl harvest allocation and catch reporting, catch areas (WAC 220-301-040) are modified as follows:

(a) Trawl Subarea 23A East: That portion of Catch Area 23A, east of a line projected true north from the New Dungeness Lighthouse (48.1818°, -123.1103°) to the International Boundary.

(b) Trawl Subarea 23A West: That portion of Catch Area 23A, west of a line projected true north from the New Dungeness Lighthouse (48.1818°, -123.1103°) to the International Boundary.

(4) The following areas are defined as shrimp beam trawl harvest areas of special designation:

(a) South Lopez Sound is defined as those waters of Lopez Sound within Subregion 1B that are south of a line projected true east-west from the northern tip of Trump Island (48.5064°, -122.8369°).

(b) Rosario Box is defined as that portion of Catch Area 22A within Subregion 1B that are east of a line projected along -122.7833° longitude (east of Blakely Island) and west of a line projected along -122.7167° longitude (west of Cypress Island) in Rosario Strait.

(c) Lummi-Sinclair Triangle is defined as those waters of Catch Area 21A north and west of a line from the southern tip of Sinclair Island (48.6097°, -122.6572°) to Carter Point (48.6404°, -122.6088°) on Lummi Island.

(5) In shrimp Subregions 1A, 1B, and 1C, all catch must be reported by catch area and subregion combined (for example 22A-1A).

**WAC 220-330-020 Crab, shrimp, crawfish—Gear and gear-related unlawful acts. General gear requirements:**

(1) It is unlawful to take, fish for, or possess crab, shrimp, and crawfish except by hand or with hand dip nets, ring nets, shellfish pots, or any hand-operated, nonmechanized instrument. It is unlawful to harvest shellfish in any manner that penetrates the shell.

(2) It is unlawful to set, fish, or pull more than 2 units of gear per person per day, unless otherwise provided in this subsection. A unit of gear is defined as a hand dip net, shellfish pot, ring net or any other instrument used to capture crab, shrimp, or crawfish. A violation of this subsection is punishable under RCW 77.15.160, 77.15.380, or 77.15.370, depending on the circumstances of the violation.

(a) In Marine Area 4 east of the Bonilla-Tatoosh line and Marine Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12, and 13 (Puget Sound), it is unlawful to set, fish, or pull more than 2 units of crab gear and 2 additional units of shrimp gear per person per day.

(b) In Marine Areas 4, 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12, and 13, it is unlawful for the operator of any boat from which shrimp pots are set, fished, or pulled to have on board or to fish more than 4 shrimp pots.

(c) In the Columbia River, it is unlawful to set, fish, or pull more than 3 units of crab gear per person.

(d) In fresh water, it is permissible to use up to 5 units of gear per person to fish for crawfish.

(3) It is unlawful to violate the following provisions regarding unattended shellfish gear:

(a)(i) Unattended shellfish gear must be marked with a buoy that permanently, visibly, and legibly lists the first and last name and permanent mailing address of the owner.

(ii) Only one person's name and address may appear on a marker buoy.

(b) All buoys must consist of durable material. It is unlawful to use bleach, antifreeze or detergent bottles, paint cans, or any other container as a buoy.

(c) Buoys must remain visible on the surface at all times, except during extreme tidal conditions, or unless otherwise authorized under a permit issued by the director.

(d) Fishers shall use only the amount of line reasonably necessary to compensate for tides, currents, and weather.

(e) The line attaching a buoy to shellfish gear must be weighted sufficiently to prevent the line from floating on the water's surface.

~~((e))~~ (f) It is unlawful to use gear that has one or more line marks or to use multicolor line consistent with requirements for any other state or federally managed commercial fishery operating in the U.S. West Coast Exclusive Economic Zone, or in the state waters of Washington, Oregon, or California.

(g) Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(4) It is unlawful to have more than one unit of unattended gear attached to a buoy line and buoy, or to fail to have a separate buoy for each unit of gear. A violation of this subsection is a misdemean-

or, punishable under RCW 77.15.382 Unlawful use of shellfish gear for personal-use purposes—Penalty.

(5) It is unlawful for any person to operate a shellfish pot not attached to a buoy bearing that person's name, except that a second person may assist the pot owner in operation of the gear. A violation of this subsection is a misdemeanor, punishable under RCW 77.15.180 Unlawful interference with fishing or hunting gear—Penalty.

(6) It is unlawful to fish for or possess shellfish taken for personal use with shellfish pot gear unless the gear allows for escapement using at least one of the following methods:

(a) Attachment of pot lid hooks or tiedown straps with a single strand or loop of untreated, 100 percent cotton twine, hemp, jute, or sisal no larger than thread size 120 so that the pot lid will open freely if the twine or fiber is broken.

(b) An opening in the pot mesh no less than 3 inches by 5 inches which is laced or sewn closed with untreated, 100 percent cotton twine, hemp, jute, or sisal no larger than thread size 120. The opening must be located within the top half of the pot and be unimpeded by the entry tunnels, bait boxes, or any other structures or materials.

(c) Attachment of pot lid or one pot side serving as a pot lid with no more than 3 single loops of untreated 100 percent cotton, hemp, jute, or sisal no larger than thread size 120 so that the pot lid or side will open freely if the twine or fiber is broken.

(d) Use of gear in violation of this subsection is an infraction, punishable under RCW 77.15.160.

(7) It is unlawful to set shellfish pots in a manner that they are not covered by water at all times. Use of gear in violation of this subsection is an infraction, punishable under RCW 77.15.160.

**(8) Gear setting and retrieval:**

(a) It is unlawful to fish, or place or retrieve gear outside of open days and hours.

(b) It is unlawful to fail to remove gear prior to the closure of a fishery.

(c) It is unlawful to fail to remove gear from the water within one hour after sunset if fishing is not allowed on the next calendar day.

(d) In waters that are open continuously, shellfish gear may be left in the water overnight, but may not be set or pulled from a vessel from one hour after official sunset to one hour before official sunrise in Marine Area 4 east of the Bonilla-Tatoosh line and Marine Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12, and 13.

**(9) Crab pot gear requirements:**

(a) All buoys attached to crab gear must be half red or half fluorescent red in color and half white in color. Flags and staff, if attached, may be any color. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(b) It is unlawful to fish for crab using shellfish pot gear greater than 13 cubic feet in volume.

(c) It is unlawful to fish for or possess crab taken with shellfish pot gear that are equipped with tunnel triggers or other devices which prevent free exit of crabs under the legal limit unless the gear is equipped with 2 or more escape rings located in the upper half of the pot and escape rings are 4 1/4 inches inside diameter or larger, except in the Columbia River where escape ring minimum size is 4 inches inside diameter.

(d) It is unlawful to use mesh size smaller than 1 1/2 inches for crab pots.

(e) Unless otherwise designated, a violation of this subsection is a violation of RCW 77.15.382. Possession of crab while using gear in violation of the provisions of this section is a rebuttable presumption that the crab were taken with such gear.

**(10) Shrimp pot gear requirements:**

(a) All buoys attached to shrimp gear must be solid yellow or solid fluorescent yellow in color. Flags and staff, if attached, may be any color. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(b) It is unlawful to take, fish for, or possess shrimp taken with shellfish pot gear unless the gear meets the following requirements:

(i) A shrimp pot may not exceed 10 feet in perimeter and 1 1/2 feet in height.

(ii) The entire top, bottom, and sides of the shrimp pot must be constructed of mesh material. Use of liners is prohibited.

(iii) Shrimp pot minimum mesh size:

(A) Year-round, Marine Areas 1, 2, 3, and 4 west of the Bonilla-Tatoosh line and shoreward of 20 fathoms, the minimum mesh size for shrimp pots is 1/2 inch. Seaward of 20 fathoms, the minimum mesh size for shrimp pots is 1 inch.

(B) May 1 through October 15, Marine Area 4 east of the Bonilla-Tatoosh line, and Marine Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12, and 13, the minimum mesh size for shrimp pots is 1 inch, with the following exception: June 1 through October 15, in any Marine Area or portion thereof that is closed for spot shrimp but open for coonstripe and pink shrimp, the minimum mesh size for shrimp pots is 1/2 inch.

(C) Half-inch mesh is defined as mesh that a 3/8 inch square peg will pass through each mesh opening; flexible (web) mesh pots must have mesh size openings that are a minimum of 1 1/8 inch stretch measure.

(D) One inch mesh is defined as a mesh that a 7/8 inch square peg will pass through each mesh opening; flexible (web) mesh pots must have mesh size openings that are a minimum of 1 3/4 inch stretch measure.

(iv) Entrance tunnels to shrimp pots may be constructed of any size mesh material. All entrance tunnels must open into the pot from the side. The sum of the maximum widths of all entrance tunnel openings must not exceed half of the perimeter of the bottom of the pot.

(v) Unless otherwise designated, a violation of this subsection is a violation of RCW 77.15.382. Possession of shrimp while using gear in violation of the provisions of this section is a rebuttable presumption that the shrimp were taken with such gear.

(c) In the field, it is unlawful for each person harvesting shrimp to fail to use a separate container to hold their catch and the container must be in the harvester's presence or identified with the harvester's name. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(d) It is unlawful to dig for or possess ghost or mud shrimp taken by any method except hand operated, nonmechanized suction devices or dug by hand.

**WAC 220-340-030 Shellfish harvest logs.** (1) **Logbook requirement:** It is unlawful for any vessel operator engaged in the commercial harvest of crawfish, sea cucumber, sea urchin, scallop, shrimp, or squid to fail to obtain and accurately and completely maintain the appropriate harvest log available from the Washington department of fish and wildlife. It is unlawful for any license holder engaged in commercial sand shrimp fishing or operator of mechanical clam digging device to fail to obtain and accurately and completely maintain the appropriate harvest log available from the Washington department of fish and wildlife.

(2) **Logbook maintenance:** It is unlawful for any harvest vessel operator or license holder engaged in harvest as described in subsection (1) of this section, to fail to maintain the required harvest log: Aboard the vessel; at the harvest site; when crawfish, sea cucumbers, sea urchins, shrimp, squid, scallops, clams, or sand shrimp are aboard during transit of a harvest vessel, or are in possession of the license holder.

(3) **Logbook submission and retention:** It is unlawful for the vessel operator or license holder, engaged in harvest as described in subsection (1) of this section, to fail to submit harvest logs for inspection upon request by department of fish and wildlife officers or authorized employees.

(4) It is unlawful for any vessel operator or license holder, engaged in harvest as described in subsection (1) of this section, to fail to comply with the following methods of logbook submittal and time frames related to harvest logbook submittal:

(a) Completed harvest logs for crawfish, coastal ocean pink shrimp, sea cucumber, sea urchin, scallop, Puget Sound shrimp pot and trawl, and squid must be received by the department within 10 days following any calendar month in which fishing occurred~~(, required completed harvest logs must be received by the department)~~; however, vessel operators or license holders may submit logs directly to authorized department employees.

(b) Vessel operators or license holders responsible for submitting logs to the department, as described in subsection (1) of this section, must maintain a copy of all submitted logs for a period of three years following the harvest activity. Copies of harvest logs, which are required to be maintained, must be available for inspection upon request by department of fish and wildlife officers and authorized employees.

(c) Original harvest logs must be maintained and submitted in ascending consecutive order of the log serial number.

(5) It is unlawful for any vessel operator or license holder, engaged in harvest as described in subsection (1) of this section, to fail to send completed harvest logs to the appropriate following mailing address, except as provided for in subsection (4)(a) of this section.

**For Puget Sound Shrimp Pot and Trawl Harvest Logbooks:**

ATTN: PUGET SOUND SHRIMP HARVEST MANAGER  
Washington Department of Fish and Wildlife  
375 Hudson St.  
Port Townsend, WA 98368.

**For Coastal Shrimp Harvest Logbooks:**

ATTN: COASTAL SHRIMP HARVEST MANAGER  
Washington Department of Fish and Wildlife  
48 Devonshire Rd.  
Montesano, WA 98563.

**For Crawfish Harvest Logbooks:**

ATTN: FISH PROGRAM - CRAWFISH HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 43150  
Olympia, WA 98504-3150.

**For Sea Urchin and Sea Cucumber Harvest Logbooks:**

ATTN: FISH PROGRAM - SEA URCHIN/SEA CUCUMBER HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 43150  
Olympia, WA 98504-3150.

**For Clam (harvest with mechanical digging devices) Harvest Logbooks:**

ATTN: FISH PROGRAM - GEODUCK HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 43150  
Olympia, WA 98504-3150.

**For Scallop Harvest Logbooks:**

ATTN: FISH PROGRAM - SCALLOP HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 43150  
Olympia, WA 98504-3150.

**For Squid (Coastal waters) Harvest Logbooks:**

ATTN: FISH PROGRAM - COASTAL SQUID HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 43150  
Olympia, WA 98504-3150.

**For Squid (Puget Sound waters) Harvest Logbooks:**

ATTN: PUGET SOUND SQUID HARVEST MANAGER  
Washington Department of Fish and Wildlife  
375 Hudson St.  
Port Townsend, WA 98368.

**For Coastal Sand Shrimp Harvest Logbooks:**

ATTN: COASTAL SAND SHRIMP HARVEST MANAGER  
Washington Department of Fish and Wildlife  
P.O. Box 190  
Ocean Park, WA 98640-0190.

**For Puget Sound Sand Shrimp Harvest Logbooks:**

ATTN: PUGET SOUND SAND SHRIMP HARVEST MANAGER  
Washington Department of Fish and Wildlife  
375 Hudson St.  
Port Townsend, WA 98368.

(6) It is unlawful for any harvest vessel operator or license holder engaged in harvest as described in subsection (1) of this section to fail to permanently and legibly record in ink the following information within the following time frames:

(a) (~~Shrimp (other than Puget Sound shrimp or sand shrimp) or crawfish with shellfish pot gear:~~) Crawfish:



(i) Before leaving the catch area where harvest occurred, record the vessel Washington department of fish and wildlife boat registration number, number of pots pulled, date pulled, soak time, and gear location; and

(ii) Immediately after delivery of shellfish to an original receiver, record the weight of all shellfish.

(b) (~~(Shrimp with beam trawl or shrimp trawl gear:)~~) **Puget Sound shrimp trawl gear:**

(i) Before commencing a new tow or prior to leaving the site where the catch was taken, record the vessel (~~(identity)~~) name, current date of fishing activity, location fished, trawl width, (~~(Marine Fish-Shellfish Management and Catch Reporting Area fished,)~~) depth fished, latitude and longitude to the nearest hundredth of a minute at the beginning of each tow, tow speed, duration of tow, and estimated weight of shrimp of each species caught for each tow.

(ii) Immediately after delivery of shrimp to an original receiver (~~(7)~~) or (~~(before leaving the last catch site of the day)~~) the submission of a fish receiving ticket, if the operator holds a wholesale fish dealer's license and is the original receiver, record the fish receiving ticket (~~(serial)~~) number.

(c) **Coastal shrimp trawl gear:**

(i) Before commencing a new tow, record the vessel name, current date of fishing activity, depth fished, latitude and longitude to the nearest hundredth of a minute at the beginning of each tow, duration of tow, estimated weight of shrimp of each species not retained for each tow, and estimated weight of shrimp of each species caught for each tow.

(ii) Immediately after delivery of shrimp to an original receiver or the submission of a fish receiving ticket, if the operator holds a wholesale fish dealer's license and is the original receiver, record the fish receiving ticket number.

(d) **Sea urchins and sea cucumbers:**

(i) Before leaving the harvest site, record the vessel identity, date, Marine Fish-Shellfish Catch Reporting Area fished, location fished, depth fished, latitude and longitude to the nearest tenth of a minute or to the nearest second, and the approximate weight in pounds of sea urchins or sea cucumbers harvested.

(ii) Upon landing or delivery to an original receiver, the exact species and weight of sea urchins, as recorded on the shellfish receiving ticket, must be recorded.

(iii) Upon landing or delivery to an original receiver, the exact weight of sea cucumbers, as recorded on the shellfish receiving ticket, and whether or not prelanded processing occurred ("whole-live" or "split-drained"), must be recorded.

(~~(d)~~) (e) **Clams, with mechanical digging devices:**

(i) Before the end of each day's fishing and departure from the harvest grounds, record the vessel identity if a harvest vessel is used in harvest operation, exact location by latitude and longitude to the nearest thousandths of a minute (recorded in WGS 84 datum), and date of harvest.

(ii) Weight by each clam species in pounds upon landing or delivery to an original receiver.

(iii) Weight in pounds of each clam species caught and returned to the harvest grounds.

(~~(e)~~) (f) **Scallops:**

(i) Before leaving the location where the catch was taken, record the vessel identity, date, location, and duration of harvest and esti-

mated weight in pounds and species of scallops caught for each tow or dive hour.

(ii) Upon landing or delivery to an original receiver, the exact weight in pounds, as recorded on the shellfish receiving ticket, and species of harvested scallops.

~~((f))~~ (g) Squid, except when taken incidental to any other lawful fishery:

(i) Coastal:

(A) Before leaving the Marine Fish-Shellfish Management and Catch Reporting Area where taken, the vessel's Washington department of fish and wildlife boat registration number, gear type, catch area, starting and ending time of fishing, and numbers of other species caught and returned.

(B) Weight in pounds of squid upon landing or delivery to an original receiver.

(ii) Puget Sound:

(A) Before leaving the Marine Fish-Shellfish Management and Catch Reporting Area where taken, the vessel's Washington department of fish and wildlife boat registration number, gear type, catch area, location (nearest landmark, bay, or GPS coordinates), starting and ending time of fishing, total vessel wattage or lumens of attracting lights, and numbers of other species caught and returned.

(B) Weight in pounds of squid upon landing or delivery to an original receiver.

~~((g))~~ (h) Sand shrimp (Puget Sound and coastal), except when taken incidental to other lawful fishery:

(i) Prior to leaving the harvest site, the location or identification number of the harvest tract, date of harvest, number of trenches pumped, average length and width of trenches (yards), total number of sand shrimp retained (dozens).

(ii) At the time of delivery to an original receiver, total number of sand shrimp sold (dozens), and the name of the sand shrimp buyer.

~~((h) Shrimp (other than sand shrimp), using shellfish pot gear in Puget Sound:)~~ (i) Puget Sound shrimp pot:

(i) Prior to leaving the harvest site, the name of vessel operator, license number, the vessel's Washington department of fish and wildlife boat registration number, buoy brand, date, phone number, pot mesh size, pull date, groundline length, number of pots pulled, depth fished, soak time, gear location (including latitude and longitude to the nearest hundredth of a minute), Shrimp Management Unit fished (region, subregion, catch area, subarea), species targeted, sorted catch estimates, and weight(s) in pounds of catch (~~(, and shellfish receiving ticket number)~~). A separate weight for each species caught and retained must be recorded. Any time that gear is deployed the location must be recorded. For pots deployed on a ~~((ground line both))~~ ground line, the start ~~((and end))~~ location ~~((s))~~ for each string must be provided.

(ii) Immediately after delivery of shrimp to an original receiver ~~(, or before leaving the last catch site of the day if the operator holds a wholesale fish dealer's license or limited fish seller endorsement and is the original receiver)~~, record the fish receiving ticket ~~((serial))~~ number.

(7) Violation of this section as it relates to failing to report required information or failing to submit log books is punishable under RCW 77.15.280 reporting of fish or wildlife harvest. Violation of this section as it relates to knowingly providing false or misleading

information is punishable under RCW 77.15.270, providing false information.

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

**WAC 220-340-455 Commercial crab fishery—Seasons and areas—Puget Sound.** The open times and areas for commercial crab fishing in Puget Sound are as follows:

(1) It is unlawful to fish for, take, or possess crab for commercial purposes except during open commercial crab harvest seasons and from open commercial crab management units as set by emergency rule. Commercial crab fishing will be open from one hour before sunrise to one hour after sunset during open seasons, except as provided below.

(2) The following areas are closed to commercial crab fisheries regulated by the department:

(a) Crab Management Regions 4, 5, and 6 (WAC 220-320-110).

(b) Those waters of Marine Fish-Shellfish Management and Catch Reporting Area 20A in Lummi Bay east of a line projected from Sandy Point Light No. 2 (48.7868°, -122.7124°) to Gooseberry Point (48.7324°, -122.6728°).

(c) Those waters of Marine Fish-Shellfish Management and Catch Reporting Area 21A in Bellingham Bay west of a line projected from the exposed boulder off the southeast portion of Point Francis (48.6973°, -122.6073°) to the old pilings at Stevie's Point (~~((0.2 miles north-west of the point where the Lehigh Cement pipeline meets the shoreline; 48.7682°, -122.5282°))~~) (48.7765°, -122.5523°).

(d) Those waters of Marine Fish-Shellfish Management and Catch Reporting Area 24A east of a line projected true north from the most westerly tip of Skagit Island (48.4131°, -122.5814°) and extending south to the most westerly tip of Hope Island (48.3959°, -122.5788°), thence southeast to Seal Rocks (48.3737°, -122.5634°), thence southeast to the green can buoy (Buoy No. 5; 48.3630°, -122.5510°) at the mouth of Swinomish Channel, thence easterly to the western tip of Goat Island (48.3630°, -122.5386°).

(e) Those waters of Marine Fish-Shellfish Management and Catch Reporting Area 24B inside a line projected from Priest Point (48.0322°, -122.2274°) to the five-meter tower (48.0156°, -122.2707°) between Gedney (Hat) Island and Priest Point, thence northwesterly on a line between the five-meter tower and Barnum Point (48.1935°, -122.4625°) to the intersection (48.1353°, -122.3999°) with a line projected true west from Kayak Point (48.1351°, -122.3678°), thence east to shore.

(f) Those waters of the Dungeness Bay Crustacean Special Management Area (WAC 220-320-120).

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

**WAC 220-340-530 Commercial shrimp trawl fishery—Puget Sound.**

## License

(1) It is unlawful to take, fish for, land, or deliver shrimp taken for commercial purposes with trawl gear from Puget Sound waters without a valid Puget Sound shrimp trawl license and a shrimp trawl permit, issued annually by the director, and without complying with all provisions of a Puget Sound shrimp trawl fishery permit.

A Puget Sound shrimp trawl license will only be issued to an individual who is a natural person, and this person shall be the primary operator. Holders of Puget Sound shrimp trawl licenses may designate a single alternate operator per license.

## Trawl gear and area restrictions

(2) It is unlawful to fish for shrimp for commercial purposes in Puget Sound using trawl gear except during seasons opened by emergency rule and authorized by a permit issued by the director.

It is unlawful to operate shrimp beam trawl gear in Puget Sound from one hour after official sunset to one hour before official sunrise.

(3) It is unlawful to retain spot shrimp with trawl gear.

(4) Gear restrictions - Beam trawl gear is the only lawful trawl gear type permitted for Puget Sound. (~~Use of otter trawl gear or other trawl gear types is unlawful.~~)

(a) Maximum beam width in Marine Fish-Shellfish Management and Catch Reporting Areas 20A, 20B, 21A, and 22A is 25 feet.

(b) Maximum beam width in Marine Fish-Shellfish Management and Catch Reporting Areas 23A (trawl Catch Area 23A; WAC 220-320-140), 23B, 23C, 25A, and 29 is 60 feet.

(5) (~~Area restrictions:~~

~~(a) Catch Areas 21B, 22B, and those waters of Catch Area 20A north and east of a line from Point Roberts Light (48.9716°, -123.0838°) to Sandy Point Light, at the Lummi Reservation (48.7868°, -122.7124°) are closed year round.~~

(b)) Depth restrictions - It is unlawful to fish for shrimp with beam trawl gear in waters shallower than the following:

(a) 100 feet in Puget Sound.

(b) 120 feet in Catch Area 20A.

(6) Closed areas - It is unlawful to fish for shrimp with beam trawl gear year-round in the following areas:

(a) Catch Area 21A except those waters of the Lummi-Sinclair Triangle, as defined in WAC 220-320-140(4).

(b) Catch Areas 21B, 22B, and those waters of Catch Area 20A north and east of a line from Point Roberts Light (48.9716°, -123.0838°) to Sandy Point Light, at the Lummi Reservation (48.7868°, -122.7124°).

(c) Subregion 1A, as defined in WAC 220-320-140 (1)(a)(i).

(d) Discovery Bay Shrimp District, as defined in WAC 220-320-120

(1)(b).

(e) Sequim Bay CSMA, as defined in WAC 220-320-120(6).

(f) Catch Area 23D.

(7) Area restrictions - The following areas are closed from the season opening through the dates described in the following paragraphs.

(a) Catch Area 20A outside of those waters north and east of a line from Point Roberts Light (48.9716°, -123.0838°) to Sandy Point Light at the Lummi Reservation (48.7868°, -122.7124°) are closed through July 31st.

~~((c) Catch Area 21A is closed year round, except that those waters north and west of a line from the southern tip of Sinclair Island (48.6097°, -122.6572°) to Carter Point (48.6404°, -122.6088°) on Lummi Island)) (b) Those waters of the Lummi-Sinclair Triangle, as defined in WAC 220-320-140 (4) (c) are closed through June 30th.~~

~~((d) In Catch Area 22A:~~

~~(i) Shrimp trawl fishing is closed in Lopez Sound south of a line projected true east-west from the northern tip of Trump Island (48.5064°, -122.8369°) from the season opening through July 9th, except as described in (f) of this subsection.~~

~~(ii) Shrimp trawl fishing is closed that portion east of a line projected along -122.7833° longitude (east of Blakely Island) and west of a line projected along -122.7167° longitude (west of Cypress Island) in Rosario Strait from the season opening through June 15th, except as described in (f) of this subsection.~~

~~(e) Subregion 1B (Catch Areas 20B and 22A) is closed through June 15th, except as described in (f) of this subsection.~~

~~(f)) (c) Those waters of South Lopez Sound, as defined in WAC 220-320-140 (4) (a), are closed through July 9th.~~

~~(d) All waters of subregion 1B, with the exception of South Lopez Sound and the Lummi-Sinclair Triangle, as defined in WAC 220-320-140(4), are closed through June 15th, except as described in (e) of this subsection.~~

~~(e) The following areas may open on the described dates and remain open from that date contingent upon the results of department-approved observer sampling to evaluate bycatch. Bycatch parameters must be satisfied for the fishery to remain open earlier than the date((s)) described in (d) ((and (e))) of this subsection.~~

~~(i) ((In Catch Area 22A, in Lopez Sound south of a line projected true east-west from the northern tip of Trump Island (48.5064°, -122.8369°): May 1st.~~

~~(ii) That portion of Catch Area 22A east of a line projected along -122.7833° longitude (east of Blakely Island) and west of a line projected along -122.7167° longitude (west of Cypress Island) in Rosario Strait:)) Those waters of the subregion 1B, except South Lopez Sound and the Lummi-Sinclair Triangle, as defined in WAC 220-320-140(4) may open as early as May 1st.~~

~~((iii) Subregion 1B (Catch Areas 20B and 22A): May 16th.~~

~~(iv)) (ii) Trawl fishers seeking to open before the date((s)) described in (d) ((and (e))) of this subsection must coordinate with the department to arrange a department-approved bycatch observation plan prior to commencing fishing.~~

~~((g) It is unlawful to fish for shrimp in Puget Sound with beam trawl gear in waters shallower than 100 feet.~~

~~(h) It is unlawful to fish for shrimp with beam trawl gear shallower than 120 feet in Catch Area 20A.~~

~~(i)) A violation of this section is punishable under RCW 77.15.750.~~

### **~~((Landing and reporting~~**

~~(6) All shrimp taken in the Puget Sound commercial shrimp fishery must be landed and recorded on Washington state fish receiving tickets within 24 hours of harvest. No fisher may land shrimp without immediate delivery to a licensed fish buyer, or if transferred at sea, without transfer to a licensed fish buyer. A fisher who is a licensed fish buyer or a limited fish seller may complete and return a fish receiving ticket to satisfy the requirements of this subsection.~~

~~(7) Harvesters must also comply with reporting provisions of WAC 220-340-030.)~~

**WAC 220-340-420 Commercial crab fishery—Unlawful acts. (1)**

**Crab size and sex restrictions.** It is unlawful for any person acting for commercial purposes to take, possess, deliver, or otherwise control:

(a) Any female Dungeness crab; or

(b) Any male Dungeness crab measuring less than 6-1/4 inches, caliper measurement, at the widest part of the shell immediately in front of the points (tips).

(2) Violation of subsection (1) of this section is a gross misdemeanor or class C felony depending on the value of fish or shellfish taken, possessed, or delivered, punishable under RCW 77.15.550 (1)(c).

(3) **Incidental catch may not be retained.** It is unlawful to retain salmon, food fish, or any shellfish other than octopus that is taken incidental to any commercial crab fishing.

(4) **Net fishing boats must not have crab on board.** It is unlawful for any person to possess any crab on board a vessel geared or equipped with commercial net fishing gear while fishing with the net gear for commercial purposes or while commercial quantities of food fish or shellfish are on board. Violation of this subsection is a gross misdemeanor or class C felony punishable under RCW 77.15.550(1), depending on the quantity of crab taken or possessed.

(5) **Area must be open to commercial crabbing.** It is unlawful for any person to set, maintain, or operate any baited or unbaited shellfish pots for taking crab for commercial purposes in any area or time that is not open for commercial crabbing by rule of the department, except when acting lawfully under the authority of a valid gear recovery permit as provided in WAC 220-340-450.

(6) Violation of subsection (5) of this section is a gross misdemeanor or class C felony punishable under RCW 77.15.550, or a gross misdemeanor punishable under RCW 77.15.522 depending on the circumstances of the violation.

(7) **When it is unlawful to buy or land crab from the ocean without a crab vessel inspection.** It is unlawful for any fisher or wholesale fish buyer to land or purchase Dungeness crab taken from Grays Harbor, Willapa Bay, the Columbia River, or Washington coastal or adjacent waters of the Pacific Ocean from any vessel that has not been issued a Washington crab vessel inspection certificate during the first 30 days following the opening of a coastal crab season.

(a) Authorized department personnel will perform inspections for Washington crab vessel inspection certificates no earlier than 12 hours prior to the opening of the coastal crab season and during the following 30-day period.

(b) A Washington crab vessel inspection certificate may be issued to vessels made available for inspection at a Washington coastal port that:

(i) Are properly licensed commercial crab fishing; and

(ii) Contain no Dungeness crab on board the vessel.

(8) Violation of subsection (7) of this section is a gross misdemeanor, punishable under RCW 77.15.550 (1)(a) Violation of commercial fishing area or time—Penalty.

(9) **Barging of crab pots by undesignated vessels.** It is unlawful for a vessel not designated on a Dungeness crab coastal or Puget Sound

fishery license to deploy crab pot gear except under the following conditions:

(a) **Coastal**

(i) The vessel deploys pot gear only during the 73-hour period immediately preceding the season opening date and during the 48-hour period immediately following the season opening date;

(ii) The undesignated vessel carries no more than 250 crab pots at any one time; and

(iii) The primary or alternate operator of the crab pot gear named on the license associated with the gear is on board the undesignated vessel while the gear is being deployed.

(b) **Puget Sound**

(i) The vessel deploys pot gear only during the 48-hour period immediately following the initial season opening date and time;

(ii) The primary or alternate operator designated on the license associated with the barged gear is on board the nondesignated vessel ("barge" vessel) while the gear is being deployed; and

(iii) The Puget Sound commercial crab license holder who owns the gear intended for barging has provided notice to the department via email at [crab.report@dfw.wa.gov](mailto:crab.report@dfw.wa.gov) at least 24 hours in advance of the fishery opening date. Notice must include the following information:

(A) Name and license number(s) of the owner of the gear being barged;

(B) Name of the designated primary operator, if different from the licensed owner;

(C) Name of the alternate operator, if used to deploy pots from a nondesignated vessel;

(D) Buoy brand number and number of pots to be deployed from a nondesignated vessel;

(E) Name and identification numbers (WN and/or Coast Guard) of the nondesignated vessel;

(F) Puget Sound Crab Management Region or set location.

(10) Violation of subsection (9) of this section is a gross misdemeanor or class C felony punishable under RCW 77.15.500 Commercial fishing without a license—Penalty, depending on the circumstances of the violation.

(11) **Storing crab prior to delivery to an original receiver, Puget Sound.** It is unlawful for a Puget Sound commercial crab license holder to store crab off-vessel prior to delivery to an original receiver, except under the following conditions:

(a) It is unlawful to store crab, off-vessel or on-vessel, for more than 10 days (~~(prior to)~~) without making a delivery to an original receiver.

(b) All crab that have been removed from a vessel and are not immediately delivered to an original receiver must be stored in containers labeled with the following:

(i) Fisher name;

(ii) WDFW-issued vessel ID number;

(iii) Puget Sound commercial crab license number;

(iv) Date of harvest;

~~((ii) An estimate of pounds of crab contained;~~

~~(iii) Either the))~~ (v) The quantity of pounds of crab retained by Crab Management Region or by Marine Fish-Shellfish (MFSF) Catch Reporting Area ((or the Crab Management Region from which the catch originated));



~~((iv))~~ (vi) Containers used for storing crab removed from a vessel and not delivered to an original receiver by 5:00 p.m. of the day following the day of harvest must additionally be labeled with the commercial fish and shellfish transportation ticket number(s).

(c) Storage of crab is subject to the reporting requirements described in WAC 220-352-340.

(12) **Electronic monitoring system (EM system)** is defined as a vessel monitoring system that automatically determines a vessel's position, records individual pot retrieval via a hydraulic pressure reading, and transmits this information to an EM system service provider. The service provider receives the transmission and provides automated data access to the Pacific States Marine Fisheries Commission (PSMFC) in a format consistent with PSMFC specifications where it is available to WDFW for management and enforcement.

(a) The department has published a compliance guide for the EM system which provides additional information and instructions to follow in complying with this regulation and is incorporated by reference herein. The guide can be obtained by contacting the EM program manager: 48 Devonshire Road, Montesano, WA 98563; phone: 360-249-4628; email: coastal.crab.EM@dfw.wa.gov or wdfw.wa.gov/fishing/commercial/crab/coastal.

(b) It is unlawful for the operator of a vessel designated to a coastal Dungeness crab license that is used to commercial fish for coastal Dungeness crab as defined by WAC 220-340-400 to fail to:

(i) Obtain an EM system that is capable of recording and transmitting vessel location and hydraulic pressure readings and have it installed on board the vessel designated to the coastal Dungeness crab license. The operating requirements for the EM system are as follows:

(A) The EM system must accurately record the vessel's position at least once every minute.

(B) The EM system must transmit the vessel location data to the service provider at least once every hour.

(C) A hydraulic pressure sensor must be installed between the crab block and the first fitting from the crab block on the main line of a vessel that controls it such that recorded pressure readings are indicative of pot hauling activity.

(D) The hydraulic pressure sensor must accurately record a pressure reading at least once every 10 seconds.

(E) The EM system must transmit hydraulic pressure sensor readings at least once every hour.

(F) If the EM system can determine when a vessel is moored, the EM system may automatically decrease the position and hydraulic pressure recording rate to at least once every hour.

(G) The EM system must be able to store vessel position and hydraulic pressure data in the event of service coverage interruption. Once service is restored, the system must transmit stored data to the service provider.

(H) The EM system must include a feedback mechanism to indicate to the vessel operator that the system is operational.

(ii) Arrange for an EM system service provider to receive and relay transmissions to Pacific States Marine Fisheries Commission (PSMFC) in a format consistent with PSMFC specifications.

(A) The following data fields must be provided to the PSMFC whenever a new system is installed, or new data transmissions begin: Vessel coast guard number, state vessel registration number, state of registration, serial number or unique identifier linked to the EM system, EM service provider name, name of the make and model of the EM

system, date the system was installed or started transmitting data, date the system was removed or stopped transmitting data.

(B) The following data fields must be recorded by the EM system and relayed to the PSMFC every hour: Serial number or unique identifier linked to the EM system, date, time, latitude, longitude, pressure reading from sensor, speed, vessel name.

(iii) Activate the EM system, submit an EM system activation report to WDFW, and receive confirmation from WDFW that the location and pressure sensor transmissions are being received before the vessel is used to fish in the coastal commercial Dungeness fishery. Commercial crab fishing is defined in WAC 220-340-400. An activation report must be submitted to WDFW under the following circumstances:

(A) Annually before gear is deployed at the start of each coastal commercial Dungeness crab season.

(B) When an EM system is reactivated following a reinstallation.

(C) When there is a change in service provider.

(D) When any changes are made to the information required in the EM activation report.

(E) After operating under a temporary exemption permit as described in (b) (v) (A), (B), and (C) of this subsection.

(iv) Operate and maintain the EM system in good working order continuously, 24 hours a day when a vessel is fishing for coastal commercial crab, as defined in WAC 220-340-400, in the Washington coastal commercial Dungeness crab fishery unless the vessel is operating under an exemption provided under (b) (v) (A), (B), (C), or (b) (vi) (A) or (B) of this subsection.

(v) Request and secure an EM exemption permit when there is an interruption in the EM system function and comply with the requirements of this subsection and the terms of the EM exemption permit. Vessels required to operate and maintain an EM system under (b) of this subsection may be temporarily exempt from this requirement if a valid WDFW EM exemption permit is received from WDFW. An exemption is only authorized for the period specified on the permit. The exemption permits are as follows:

(A) EM system failure exemption permit. Vessels required to operate and maintain an EM system under (b) of this subsection may be temporarily exempt from EM system requirements in situations due to an EM system failure, or hydraulic pressure sensor failure by obtaining an EM system failure exemption permit. In the event a system failure exemption permit is granted by WDFW, the operator of the vessel must submit a harvest logbook per WAC 220-340-460 and use electronic navigational equipment (including, but not limited to, chart plotters, hand-held global positioning systems, etc.) to record a track line of the vessel's movements while commercial crab fishing, and track line information must be made available to WDFW officers or authorized employees immediately upon request and retained for 30 days. Requests for multiple exemption permits for a single vessel within a season will be reviewed and approved at the discretion of WDFW.

(B) Haul out exemption permit. Vessels required to operate and maintain an EM system under (b) of this subsection may be temporarily exempted from EM requirements when it is anticipated that a vessel's EM system will be inoperable due to removing the vessel from the water for less than 14 days and coastal commercial Dungeness crab gear will remain lawfully deployed by obtaining a "Haul Out Exemption Permit" from WDFW.

(C) Emergency exemption permit: Vessels required to operate and maintain an EM system under (b) of this subsection may be exempt from

EM requirements in emergency situations rendering the vessel's EM system inoperable for less than 14 days including, but not limited to, fire, flooding, or extensive physical damage to critical areas of the vessel by obtaining an emergency exemption permit from WDFW.

(D) To request an exemption permit described in (b)(v) of this subsection, a vessel owner must contact WDFW. For an exemption permit to be valid, a request must be received by WDFW as soon as it is apparent that there is a system failure or emergency or at least 2 hours before a haul out exemption is needed. A vessel will be required to submit an activation report under (b)(iii) of this subsection before returning to fish.

(vi) Submit a long-term departure exemption report. A vessel that is required to operate and maintain an EM system under (b) of this subsection may be exempt from this requirement if a long-term departure exemption report is submitted to WDFW in compliance with all the conditions described in (b)(vi)(A), (B), or (C) of this subsection. The basis for a long-term departure exemption report are as follows:

(A) Suspension of fishing operations. Vessels required to operate and maintain an EM system under (b) of this subsection may be exempted from EM system requirements when the vessel has concluded fishing for coastal commercial Dungeness crab for the current season or has suspended fishing operations such that all commercial gear is removed from waters open to the coastal Dungeness crab fishery.

(B) Emergency. Vessels required to operate and maintain an EM system under (b) of this subsection may be exempted from EM system requirements in emergency situations rendering the vessel's EM system inoperable for more than 14 days including, but not limited to, fire, flooding, or extensive physical damage to critical areas of the vessel, and the vessel will not resume fishing for coastal commercial Dungeness crab for the remainder of the current season.

(C) Long-term departure reports must be received by WDFW no later than 24 hours after a vessel has concluded fishing for the season.

(vii) Contact WDFW immediately if transmission of position and pressure sensor readings have been interrupted and no more than 24 hours after being notified by WDFW that position and pressure sensor readings are not being received, by notifying the EM program manager, phone: 360-249-4628, or email [coastal.crab.EM@dfw.wa.gov](mailto:coastal.crab.EM@dfw.wa.gov).

(viii) Make the EM system available for inspection by WDFW enforcement personnel, USCG personnel, or any authorized employee upon request.

(ix) Ensure that the EM system or signal is not interfered with, tampered with, disabled, or destroyed and is operated and maintained according to the EM system provider instructions.

(x) Pay all charges levied by the service provider as necessary to ensure continuous operation of the EM system.

(13) Violation of subsection (12) of this section is a gross misdemeanor punishable under RCW 77.15.520 Commercial fishing—Unlawful gear or methods—Penalty.

**WAC 220-340-430 Commercial crab fishery—Gear requirements. (1) Buoy tag and pot tag required.**

(a) It is unlawful to place in the water, pull from the water, possess on the water, or transport on the water any crab buoy or crab pot without an attached buoy tag and pot tag that meet the requirements of this section, except as provided by (b) and (c) of this subsection. A violation of this subsection is punishable under RCW 77.15.520 Commercial fishing—Unlawful gear or methods—Penalty.

(b) Persons operating under a valid coastal gear recovery permit as provided in WAC 220-340-440 may possess crab pots or buoys missing tags or bearing the tags of another license holder, provided the permittee adheres to provisions of the permit. Failure to adhere to the provisions of the permit is a gross misdemeanor, punishable under RCW 77.15.750 Unlawful use of a department permit—Penalty.

(c) Persons operating under a valid coastal gear transport permit as provided in WAC 220-340-440 may possess crab pots or buoys bearing the tags issued by another state, provided the permittee adheres to provisions of the permit. Failure to adhere to the provisions of the permit is a gross misdemeanor, punishable under RCW 77.15.750 Unlawful use of a department permit—Penalty.

(2) **Commercial crab fishery pot tag requirements:** Each shellfish pot used in the commercial crab fishery must have a durable, nonbiodegradable tag securely attached to the pot that is permanently and legibly marked with the license owner's name or license number and telephone number. If the tag information is illegible, or the tag is lost for any reason, the pot is not in compliance with state law. A violation of this subsection is punishable under RCW 77.15.520 Commercial fishing—Unlawful gear or methods—Penalty.

(3) **Commercial crab fishery buoy tag requirements.**

(a) The department issues crab pot buoy tags to the owner of each commercial crab fishery license upon payment of an annual buoy tag fee per crab pot buoy tag. Prior to setting gear, each Puget Sound crab license holder must purchase 100 tags, and each coastal crab fisher must purchase 300 or 500 tags, depending on the crab pot limit assigned to the license.

(b) In coastal waters, except if authorized by permit issued by the director, each crab pot must have the department-issued buoy tag securely attached to the first buoy on the crab pot buoy line (the buoy closest to the crab pot), and the buoy tag must be attached to the end of the first buoy, at the end away from the crab pot buoy line.

(c) In Puget Sound, except if authorized by permit issued by the director, all crab buoys must have the department-issued buoy tag attached to the outermost end of the buoy line.

(d) If there is more than one buoy attached to a pot, only one buoy tag is required.

(e) All remaining, undeployed buoy tags per license per region must be onboard the designated vessel and available for immediate inspection by the department, except under the following conditions: The holder or alternate operator of a Puget Sound crab license has declared, as permitted under (f) of this subsection, that deployed tags have been lost and are unrecoverable, under penalty of perjury, and

has been granted permission by the department to use undeployed buoy tags as a replacement.

(f) Replacement crab buoy tags.

(i) Puget Sound: ~~((The department only issues additional tags to replace lost tags to owners of Puget Sound commercial crab fishery licenses who obtain, complete, and sign a declaration, under penalty of perjury, in the presence of an authorized department employee. The declaration must state the number of buoy tags lost, the location and date where the licensee last observed lost gear or tags, and the presumed cause of the loss.))~~ Puget Sound commercial crab license holders are required to request permission to use undeployed buoy tags in the event deployed buoy tags are lost and are unrecoverable. Requests to use undeployed buoy tags must state the number of buoy tags lost, the location and date where the licensee last observed lost gear or tags, and the presumed cause of the loss. Requests must be made using a department provided electronic form.

(ii) Coastal: The department only issues replacement buoy tags for the coastal crab fishery in the case of extraordinary loss or on a case-by-case basis. Replacement buoy tags will not be issued in excess of the license holder's permanent pot limit.

(4) A violation of subsection (3) of this section is a gross misdemeanor, punishable under RCW 77.15.520 Commercial fishing—Unlawful gear or methods—Penalty.

(5) **Commercial crab fishery buoy requirements.**

(a) All buoys attached to commercial crab gear must consist of a durable material and remain floating on the water's surface when 5 pounds of weight is attached, unless otherwise authorized by permit issued by the director.

(b) It is unlawful to use bleach, antifreeze or detergent bottles, paint cans, or any other container as a buoy. The line attaching a buoy to shellfish gear must be weighted sufficiently to prevent the excess line from floating on the water's surface.

(c) No buoys attached to Puget Sound or coastal commercial crab gear ~~((in Puget Sound))~~ may be both red and white in color unless a minimum of 30 percent of the surface of each buoy is also prominently marked with an additional color or colors other than red or white. Red and white colors are reserved for personal use crab gear as described in WAC 220-330-020.

(d) It is unlawful for any coastal or Puget Sound commercial Dungeness crab fishery license holder to fish for crab unless the license holder has registered the buoy brand and buoy color(s) to be used with the license. The license holder, or alternate operator, must register the buoy brand and buoy color(s) to be used with the license each crab season using the WDFW online registration form. In the event that a license is transferred to another vessel or owner in the same season, the license holder must reregister the buoy brand and buoy color(s) to be used with the license for the remainder of that crab season. A license holder may register only one unique buoy brand and one unique buoy color scheme with the department per license. Persons holding more than one state license must register buoy color(s) for each license that are distinctly different. The buoy color(s) will be shown in a color photograph.

(i) All buoys fished under a single license must be marked in a uniform manner with one buoy brand number registered by the license holder with the department and be of identical color or color combinations, unless otherwise authorized by permit issued from the director.

(ii) It is unlawful for a coastal Dungeness crab fishery license holder to fish for crab using any other buoy brand or color(s) than those registered with and assigned to the license by the department.

**(6) (~~Coastal~~) Commercial crab fishery line requirements.**

(a) All crab pots used in (~~the coastal~~) any Dungeness crab fishery shall be set up to use only the amount of line reasonably necessary to compensate for tides, currents, and weather.

(b)(i) It is unlawful for a coastal Dungeness crab fishery license holder to use line that connects the main buoy to the crab pot that is not marked sufficiently to identify it as gear used exclusively in the Washington coastal Dungeness crab fishery.

(ii) For each shellfish pot used in the Washington coastal commercial Dungeness crab fishery and rigged with line, that line must be marked with no less than 12 continuous inches of red in at least two places. At a minimum, 12 continuous inches of line must be marked in red, no more than one fathom from the main buoy and no more than one fathom from the pot.

(7) Violation of subsection (5) of this section is a gross misdemeanor, punishable under RCW 77.15.520 Commercial fishing—Unlawful gear or methods—Penalty.

AMENDATORY SECTION (Amending WSR 17-05-112, filed 2/15/17, effective 3/18/17)

**WAC 220-340-460 Commercial crab fishery—Coastal Dungeness crab logbook requirements.** (1) It is unlawful for any vessel operator engaged in fishing for Dungeness crab in the coastal commercial fishery without a fully operational electronic monitoring system to fail to have in possession, and to complete a department-issued paper or a department-approved electronic logbook for all fishing activity occurring in Grays Harbor, Willapa Bay, the Columbia River, or the Pacific Ocean waters for all crab deliveries to a Washington port. Fully operational means the electronic monitoring system is collecting, storing, and transmitting data per WAC 220-340-420(12). For the purposes of this section, "delivery" is defined as provided in RCW 77.65.210.

(2) It is unlawful for any vessel operator engaged in fishing without a fully operational electronic monitoring system to fail to comply with the following method and time frame related to harvest logbook submittal and record keeping:

(a) The department must receive a copy of the completed logbook sheets or electronic fields within (~~ten days~~) 24 hours following any (~~calendar month in which fishing occurred~~) landing made by a vessel while fishing for Dungeness crab in the coastal commercial fishery without a fully operational electronic monitoring system. Completed Dungeness crab harvest (~~logs~~) logbooks must be (~~sent~~) submitted to the (~~following address:~~) Washington department of fish and wildlife (~~(, Attention: Coastal Dungeness Crab Manager, 48 Devonshire Rd., Montesano, WA 98563)~~) using a WDFW logbook drop box or the following electronic mail address: coastal.crab.EM@dfw.wa.gov.

(b) Vessel operators engaged in fishing for Dungeness crab in the coastal commercial fishery and without a fully operational electronic monitoring system must complete a logbook entry for each day fished prior to offloading. Vessel operators responsible for submitting

((logs)) harvest logbooks to the department must maintain a copy of all submitted ((logs)) harvest logbooks for no less than three years after the fishing activity ended.

(c) Vessel operators can obtain paper logbooks by contacting the department's coastal Dungeness crab manager at 360-249-4628 or at coastal.crab.EM@dfw.wa.gov.

(3) A violation of this section is an infraction, punishable under RCW 77.15.160.

AMENDATORY SECTION (Amending WSR 17-05-112, filed 2/15/17, effective 3/18/17)

**WAC 220-340-510 Commercial ocean spot shrimp pot fishery—Coastal waters.** It is unlawful to fish for, possess, or deliver ocean spot shrimp (*Pandalus platyceros*) taken for commercial purposes from state waters west of the Bonilla-Tatoosh line, or from offshore waters, except as provided for in this section:

**License and area**

(1) It is unlawful to fish for, possess, or deliver spot shrimp taken for commercial purposes from state waters west of the Bonilla-Tatoosh line, or from offshore waters, unless the fisher has a valid Washington-coastal spot shrimp pot fishery license. A violation of this subsection is punishable under RCW 77.15.500, Commercial fishing without a license—Penalty.

(2) It is unlawful to fish for or possess spot shrimp or to set spot shrimp gear in waters of the Pacific Ocean adjacent to the state of Oregon without the licenses or permits required to commercially fish for spot shrimp within the state waters of Oregon. A violation of this subsection is punishable under RCW 77.15.550, Violation of commercial fishing area or time—Penalty.

**Season**

(3) It is unlawful to fish for, take, or possess spot shrimp on board a commercial fishing vessel, except from March 15 through September 15 of each year. A violation of this subsection is punishable under RCW 77.15.550, Violation of commercial fishing area or time—Penalty.

(4) The total allowable catch of spot shrimp taken from waters west of the Bonilla-Tatoosh line and from offshore waters during a calendar year is 200,000 pounds round weight. Of this 200,000 pounds round weight, no more than 100,000 pounds can be taken south of 47 degrees 04.00' N. latitude, and no more than 100,000 pounds can be taken north of 47 degrees 04.00' N. latitude.

**Gear**

(5) It is unlawful to fish with spot shrimp pot gear for commercial purposes if the pots exceed a maximum 153-inch bottom perimeter and a maximum 24-inch height. It is unlawful to possess spot shrimp taken with spot shrimp pot gear that exceeds a maximum 153-inch bottom perimeter and a maximum 24-inch height.

(a) Shrimp pot gear must be constructed with net webbing or rigid mesh. At least 50 percent of the net webbing or mesh covering the

sides of the pot must easily allow passage of a seven-eighths inch diameter dowel.

(b) Pot gear is required to have an escape mechanism as provided for in WAC 220-340-060.

(c) Set line end marker buoys must be floating and visible on the surface of the water, equipped with a pole, flag, radar reflector, and operating light, and marked with the clear identification of the license holder and the vessel designated on the coastal spot shrimp pot license.

(d) Fishers shall use only the amount of line reasonably necessary to compensate for tides, currents, and weather.

(6) It is unlawful to fish for spot shrimp for commercial purposes with more than a maximum of 500 pots. It is unlawful to possess spot shrimp taken for commercial purposes with more than a maximum of 500 pots.

(7) It is unlawful to use gear that has one or more line marks or to use multicolor line consistent with requirements for any other state or federally managed commercial fishery operating in the U.S. West Coast Exclusive Economic Zone, or in the state waters of Washington, Oregon, or California.

(8) A violation of subsection (5) or (6) of this section is punishable under RCW 77.15.520, Commercial fishing—Unlawful gear or methods—Penalty.

#### **Incidental catch**

~~((8))~~ (9) It is unlawful for persons fishing in any coastal spot shrimp fishery to deliver spot shrimp while having on board the fishing vessel any bottomfish taken in the coastal bottomfish fishery under WAC 220-355-100.

~~((9))~~ (10) It is unlawful to retain any species of finfish or shellfish taken with spot shrimp pot gear, except octopus, squid, or up to 50 pounds round weight of other shrimp species taken incidentally with spot shrimp pot gear.

~~((10))~~ (11) A violation of subsection ~~((8))~~ (9) or ~~((9))~~ (10) of this section is punishable under RCW 77.15.550, Violation of commercial fishing area or time—Penalty.

#### **Harvest logs**

~~((11))~~ (12) It is unlawful for any spot shrimp pot fishery license holder or vessel operator engaged in fishing for spot shrimp in the coastal commercial spot shrimp fishery to fail to complete a department-issued harvest log for all fishing activity in state or offshore waters.

~~((12))~~ (13) It is unlawful for any vessel operator engaged in fishing for spot shrimp for commercial purposes to fail to comply with the following method and time frame related to harvest log submittal and recordkeeping:

(a) Completed harvest logs must be submitted so that the department receives them within ~~((ten))~~ 10 days following any calendar month in which fishing occurred. Washington-coastal spot shrimp pot license holders can submit the completed harvest logs to a WDFW employee upon request, or mail the completed harvest logs to Washington Department of Fish and Wildlife, Attention: Coastal Spot Shrimp Manager, 48 Devonshire Rd., Montesano, WA 98563.

(b) Washington-coastal spot shrimp pot license holders or vessel operators engaged in fishing for spot shrimp in the coastal commercial



fishery must complete a harvest log entry for each day fished, prior to offloading the spot shrimp. Washington-coastal spot shrimp pot license holders must maintain a copy of all submitted harvest log entries for no less than three years after the fishing activity ended.

(c) Washington-coastal spot shrimp pot license holders or vessel operators can obtain a harvest logbook by contacting the department's coastal spot shrimp manager at 360-249-4628.

~~((13))~~ (14) A violation of subsection ~~((11))~~ (12) or ~~((12))~~ (13) of this section is a misdemeanor, punishable under RCW 77.15.280, Reporting of fish or wildlife harvest—Rules violation—Penalty.

#### **Permit**

~~((14))~~ (15) It is unlawful to fish for, retain, land, or deliver spot shrimp taken with pot gear for commercial purposes without a valid coastal spot shrimp pot fishery permit.

~~((15))~~ (16) It is unlawful to take, retain, land, or deliver any spot shrimp taken with pot gear without complying with all provisions of a coastal spot shrimp pot fishery permit.

~~((16))~~ (17) A violation of subsection ~~((14))~~ (15) or ~~((15))~~ (16) of this section is punishable under RCW 77.15.750, Unlawful use of a department permit—Penalty.

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

### **WAC 220-340-520 Commercial shrimp pot fishery—Puget Sound.**

#### **License**

(1) It is unlawful to take, fish for, land, or deliver shrimp taken for commercial purposes with pot gear from Puget Sound waters without a valid Puget Sound shrimp pot license.

A Puget Sound shrimp pot license will only be issued to an individual who is a natural person, and this person shall be the primary operator. Holders of Puget Sound shrimp pot licenses may designate a single alternate operator per license.

#### **Pot Gear and area**

(2) It is unlawful to fish for shrimp for commercial purposes in Puget Sound using shellfish pot gear except during seasons opened by emergency rule.

(3) ~~((Gear restrictions in all areas, maximum 100 pots per fisher))~~ In all areas fishers are limited to a maximum of 100 spot shrimp pots, as defined in subsection (5)(d) of this section, and a maximum of 100 nonspot shrimp pots, as defined in subsection (5)(e) of this section, except for dual licensees as provided for in RCW 77.70.410.

(4) Buoy requirements, in all areas:

(a) Buoys must be solid orange in color and consist of durable material that will remain floating on the surface with five pounds attached; bleach or antifreeze bottles or other containers may not be used as floats.

(b) Buoys must be marked with the clear identification of the license holder and the vessel designated on the Puget Sound shrimp pot license.

(c) When two or more shrimp pots are attached to a common ground line, the number and type of pots (spot shrimp or nonspot shrimp pot) so attached must be clearly labeled on the required buoy.

(d) Fishers shall use only the amount of line reasonably necessary to compensate for tides, currents, and weather. The line attaching the pot to the buoy must be weighted sufficiently to prevent the line from floating on the surface.

(e) It is unlawful to use gear that has one or more line marks or to use multicolor line consistent with requirements for any other state or federally managed commercial fishery operating in the U.S. West Coast Exclusive Economic Zone, or in the state waters of Washington, Oregon, or California.

(5) Pot requirements, in all areas:

(a) A shrimp pot may not exceed a maximum of 153-inch bottom perimeter and a maximum of 24-inch height.

(b) The entire top, bottom, and sides of the shrimp pot must be constructed of mesh material. Use of liners is prohibited.

(c) Entrance tunnels to shrimp pots may be constructed of any size mesh material. All entrance tunnels must open into the pot from the side. The sum of the maximum widths of all entrance tunnel openings must not exceed half of the perimeter of the bottom of the pot.

(d) Spot shrimp may only be harvested using pots with a minimum mesh size of one inch. Mesh size of one inch is defined as a mesh opening that a 7/8-inch square peg will pass through, excluding the entrance tunnels, except for flexible (web) mesh pots, where the mesh must be a minimum of 1 3/4 inch stretch measure. Stretch measure is defined as the distance between the inside of one knot to the outside of the opposite vertical knot of one mesh, when the mesh is stretched vertically.

(e) Nonspot shrimp may only be harvested using pots with a minimum mesh size 1/2 inch. Mesh of 1/2 inch is defined as a mesh that a 3/8 inch square peg will pass through, excluding the entrance tunnels, except for flexible (web) mesh pots, where the mesh must be at a minimum 1 1/8 inch stretch measure. Stretch measure is defined as the distance between the inside of one knot to the outside of the opposite vertical knot of one mesh, when the mesh is stretched vertically.

(6) Harvest restrictions, all areas:

(a) It is unlawful to set or pull shrimp pot gear from one hour after official sunset to one hour before official sunrise.

~~(b) ((It is unlawful to deploy spot shrimp pots and nonspot shrimp pots concurrently within the same Catch Reporting Area, with the following exceptions:~~

~~(i) Spot and nonspot shrimp pots may be concurrently deployed in Catch Area 23A but not within the same subarea (23A-E, 23A-W, 23A-C, or 23A-S) concurrently.~~

~~(ii) Nonspot pots may be deployed within Sequim Bay CSMA (WAC 220-320-120) concurrently with spot shrimp pots deployed in the remaining portion of Catch Area 25A outside of Sequim Bay CSMA.~~

~~(iii) All shrimp harvested must be landed and recorded on a shellfish receiving ticket before subsequent harvest may occur.~~

(e)) Each fisher or alternate operator is required to report their intended catch area of harvest, target species (spot or non-spot), and an estimate of total pounds that are being targeted prior to the deployment of any shrimp gear by email or text message to [shrimp.report@dfw.wa.gov](mailto:shrimp.report@dfw.wa.gov), or by using the Puget Sound commercial shrimp reporting website.

~~((d))~~ (c) It is unlawful to harvest nonspot and spot shrimp in the same day.

~~((e) It is unlawful to harvest shrimp in more than one catch area per day, except for concurrent pot deployment described in (b) of this subsection.~~

~~(f))~~ (d) Nonspot shrimp pot harvest restrictions:

(i) Harvest of nonspot shrimp is not permitted deeper than 175 feet in Shrimp Management ((Area)) Region 2E.

(ii) Harvest of nonspot shrimp is not permitted deeper than 175 feet in Shrimp Management Subregion 1A.

(iii) Harvest of nonspot shrimp is not permitted deeper than 175 feet in Catch Area 23A including the corresponding shrimp subareas (23A-E, 23A-W, 23A-S, 23A-C).

(iv) Harvest of nonspot shrimp is not permitted deeper than 150 feet in Shrimp Management Region 2W.

**(Reporting**

~~(7) All shrimp taken in the Puget Sound commercial shrimp fishery must be landed and recorded on Washington state fish receiving tickets within 24 hours of harvest. No fisher may land shrimp without immediate delivery to a wholesale fish buyer, or if transferred at sea, without transfer to a wholesale fish buyer. A fisher who is a wholesale fish buyer or a limited fish seller may complete and return a fish receiving ticket to satisfy the requirements of this subsection.)~~

**WAC 220-352-060 Completion, submission, distribution, and retention of copies of nontreaty fish receiving tickets.** (1) Original receivers must complete state of Washington nontreaty fish receiving tickets by recording the delivery amount using the appropriate weight or quantity measure for all fish or shellfish at the conclusion of the offload and prior to the fish or shellfish being processed or transported away from the delivery site.

(2) Fish receiving tickets paper forms must be made out in quadruplicate (four copies) at the time of delivery of fish or shellfish. Original receivers must use fish receiving tickets in numerical sequence, starting with the lowest numbered ticket issued. Original receivers reporting using paper forms must:

(a) Mail the state copy (green) of the fish receiving ticket to the department of fish and wildlife (department), except for original receivers who submit a fish receiving ticket in portable document format (PDF) to satisfy quick reporting requirements for salmon and sturgeon under WAC 220-352-315, 220-352-320, 220-352-325 and 220-352-330. The department must receive the state copy no later than the sixth working day after the day the original receiver completes the fish ticket.

(b) Retain the dealer copies (white and yellow) of the fish receiving ticket for his or her records.

(c) The deliverer must retain the fisher copy (gold) for his or her records.

(3) Original receivers who are required to submit fish receiving tickets using an electronic form under WAC 220-352-035(2) must:

(a) (i) ~~((Submit the ticket within 24 hours of completion of the delivery if required to report electronically under WAC 220-352-035(2))~~ For deliveries completed on a mobile device, original receivers are required to fill out an electronic fish ticket form at the delivery location and submit it immediately following the completion of the delivery of fish or shellfish to the original receiver before leaving the delivery location.

In the event of a cellular or broadband outage or lack of service at the delivery site, the original receiver must submit the ticket immediately upon regaining access to a cellular or broadband connection following the completion of the delivery.

(ii) For deliveries of fish and shellfish made to original receivers using a nonmobile device or desktop electronic fish ticket form, the original receiver must submit the ticket within 24 hours after the delivery is completed except:

~~((ii))~~ For deliveries ((made by vessels fishing and delivering under a) of coastal Dungeness crab ((license)), the original receiver must submit the ticket by the close of the next business day after the delivery is ((completed)) complete.

(b) Submit the ticket in compliance with the timely reporting conditions set forth in the electronic fish receiving ticket reporting agreement if reporting voluntarily under WAC 220-352-035(3).

(4) Original receivers who submit fish receiving tickets using an electronic form must print and retain a copy of the completed electronic fish receiving ticket for three years unless:

(a) The fish receiving ticket is signed electronically under WAC 220-352-140 (4) (c) and an electronic copy of the signed and completed

fish receiving ticket is available to the department including WDFW officers upon request for a minimum of three years; or

(b) An alternative fish ticket retention requirement is specified in the electronic fish receiving ticket agreement governing the voluntary reporting of the delivery.

AMENDATORY SECTION (Amending WSR 18-11-052, filed 5/10/18, effective 6/10/18)

**WAC 220-352-230 Commercial fish and shellfish transportation ticket.**

(1) If fish or shellfish are transported from a vessel or catch site (if the fishery does not require a vessel) prior to completing a fish receiving ticket, the fisher must complete a commercial fish and shellfish transportation ticket as required by this section. The transportation ticket must accompany the fish or shellfish until the fish receiving ticket is completed. The purpose of this rule is to ensure catch accountability when fish or shellfish are transported by the fisher or his or her designee before a fish receiving ticket is required to be completed. Fish receiving ticket requirements under this chapter are still in effect.

(2) The fisher must complete the department provided transportation ticket with the following information:

(a) The name of the fisher who caught the fish or shellfish.

(b) The fisher's (~~vessel registration~~) WDFW-issued vessel ID number.

(c) The signature of the fisher or additional operator.

(d) The name of the transporter.

(e) The catch area where the fish or shellfish were caught.

(f) The species of fish or shellfish being transported.

(g) The individual number or approximate pounds of fish or shellfish being transported, as required under WAC 220-352-040.

(h) The date(s) the fish or shellfish were harvested.

(3) In cases where the fisher does not deliver the fish or shellfish to an original receiver within twenty-four hours after offloading, the fisher must send a copy of the completed transportation ticket to the department. The completed ticket must arrive within the sixth working day. Once the fisher delivers the fish or shellfish to the original receiver, a copy of the transportation ticket must be attached or the ticket number must be written on the fish receiving ticket.

(4) In cases where an agent of the fisher delivers fish or shellfish with a transportation ticket to the original receiver, the original receiver must mail the transportation ticket, together with the state copy of the fish receiving ticket as required in WAC 220-352-060, 220-352-090, and 220-352-130. If the commercial fisher delivers and signs the fish receiving ticket, only the fish receiving ticket must be mailed in, and the transportation ticket is not required to be submitted with it.

Transportation tickets completed for deliveries reported using electronic fish receiving ticket forms should be attached to the printed and signed copy of the form, as required by WAC 220-352-140(5).

(5) Any person transporting commercially taken fish or shellfish or commercial quantities of fish or shellfish must provide a transpor-

tation ticket for inspection upon demand by a fish and wildlife officer.

(6) The provisions of this section do not apply to:

(a) Fish and shellfish purchased at retail, provided the purchaser has, in his or her possession, a sales receipt documenting the purchase;

(b) Fish or shellfish for which a fish receiving ticket has been completed and a copy of the fish receiving ticket is in the possession of the person transporting;

(c) Fish or shellfish being transported by the department;

(d) Hatchery carcass sales;

(e) Private sector cultured aquatic products in transport;

(f) Fish or shellfish being transported on a completed Oregon transportation ticket, provided that the fish were caught in the concurrent waters of the Columbia River and were landed on Washington's shore; and

(g) Fish or shellfish being transported in the catching vessel, provided that the vessel is not being transported or towed over land.

AMENDATORY SECTION (Amending WSR 22-08-048, filed 3/31/22, effective 5/1/22)

**WAC 220-352-340 Puget Sound crab—Additional reporting requirements.** (1) **License registration:** Puget Sound commercial crab license holders, or their designated alternate operators, must register which Crab Management Region to which gear will be deployed for each license they hold prior to the fishery opening date.

(a) Registrations must be updated when gear moves between areas.

(b) The department must be notified if gear is not going to be deployed for a period of 72 hours or longer.

(c) Registrations must be made by registering via the WDFW Puget Sound commercial crabbing web page or via email or text to [crab.report@dfw.wa.gov](mailto:crab.report@dfw.wa.gov).

(d) Reports must include the following information:

(i) Vessel operator name;

(ii) Vessel name and WDFW-issued vessel (~~(registration)~~) ID number;

(iii) Permit number(s) to be fished;

(iv) Crab Management Region to be fished;

(v) Gear deployment date.

(2) **Quick reports:** Any person originally receiving or purchasing Dungeness crab taken from Puget Sound by nontreaty fishers must report to the department the previous day's purchases by 10:00 a.m. the following day.

(a) Reports must be sent by email or text message to [crab.report@dfw.wa.gov](mailto:crab.report@dfw.wa.gov), or by using the Puget Sound commercial crab reporting website.

(b) For crab originally received or purchased by a licensed fish buyer, reports must include, for each fish receiving ticket completed by a licensed fish buyer:

(i) The name and department-issued license number of the wholesale fish buyer or limited fish seller;

(ii) The phone number or email address of the wholesale fish buyer or limited fish seller;

(iii) The date of landing of crab; and

(iv) The quantity of pounds of crab delivered, by Crab Management Region (WAC 220-320-110) or by Marine Fish-Shellfish Management and Catch Reporting Area (WAC 220-301-040).

(c) Receivers who complete and submit an electronic fish receiving ticket form, which is also received by the department, per the provisions of WAC 220-352-035 are exempted from the requirements of this subsection.

(3) **Shellfish transportation tickets:** If crab are transported from a vessel prior to completing a fish receiving ticket and not delivered to an original receiver by 5:00 p.m. on the day following the day of harvest, the fisher must complete and submit a commercial fish and shellfish transportation ticket per the provisions of WAC 220-352-230 and submit a transported crab quick report to the department.

(a) "Transported" is intended to include crab stored off, but in close proximity to, a vessel with Puget Sound commercial crab license beyond 5:00 p.m. on the day following the day of harvest and prior to delivery to an original receiver.

(b) ~~((Separate))~~ "Stored" is intended to include crab removed from, and stored in close proximity to, a vessel with a Puget Sound commercial crab license prior to delivery to an original receiver up until 5:00 p.m. the day following the day of harvest.

~~(c) Each day's harvest that is not delivered to a licensed fish buyer by 5:00 p.m. on the day following the day of harvest must be recorded separately on a commercial fish and shellfish transportation ticket(s) ((must be filled out for each day's harvest that is not delivered to a licensed fish buyer by 5:00 p.m. on the day following the day of harvest)).~~

(4) **Stored or transported crab quick reports:** Stored or transported crab quick reports must be submitted by the fisher and received by the department by 10:00 a.m. the day following the day crab are off-loaded from the vessel ~~((for storage))~~. Reports must be made ~~((online))~~ using the department-provided electronic forms on the Puget Sound commercial crab reporting website, or by email or text to [crab.report@dfw.wa.gov](mailto:crab.report@dfw.wa.gov). Reports must include:

~~(a) ((The name of the fisher who caught the crab))~~ Fisher name;

~~(b) ((The))~~ WDFW-issued vessel ID number;

~~(c)~~ Puget Sound commercial crab license number;

~~(d)~~ Date of harvest ((of the crab));

~~((c) Puget Sound commercial license number of the fisher who caught the crab;~~

~~(d) The vessel ID from which the crab were harvested;~~

~~(e) The number of containers used to store the crab;~~

~~(f) The approximate weight of the crab retained;~~

~~(g) Catch Reporting Area of crab harvested;~~

~~(h-))~~ (e) The quantity of pounds of crab retained by Crab Management Region or by Marine Fish-Shellfish ((Management)) Catch Reporting Area; ~~((and~~

~~(i-))~~ (f) Shellfish transportation ticket number(s).

(5) ~~**((Delivery of crab previously retained beyond 5:00 p.m. on the day following the day of harvest (transported crab):))**~~ **Sale of stored or transported crab quick report:** Commercial harvesters of crab in Puget Sound must report ~~((the delivery to an original receiver of all transported crab))~~ to the department the delivery of stored or

transported crab to an original receiver. Reports are due by 10:00 a.m. the day following the delivery ((to an original receiver)). Reports must be made using the department-provided electronic forms on the Puget Sound commercial crab reporting website, or by email or text to crab.report@dfw.wa.gov. Reports must contain:

- (a) Fisher name;
- (b) WDFW-issued vessel ID number;
- (c) Puget Sound commercial crab license number;
- (d) Date of sale;
- (e) Dealer name;
- (f) Commercial shellfish transportation ticket number(s) associated with the delivered crab; and
- (g) Fish receiving ticket number(s) corresponding to landing date of delivery.



**WAC 220-360-220 Hagfish pot trial fishery—Season and gear.** It is unlawful to fish for hagfish for commercial purposes except as provided in this section:

- (1) Season - Open year-round to hagfish pot gear only.
- (2) Area - Open only in Pacific Ocean waters greater than 50 fathoms in depth.
- (3) Gear restrictions:
  - (a) Maximum of 100 hagfish pots per permit. Pots may be fished individually or on a common ground line.
  - (b) Hagfish pot gear requirements:
    - (i) Maximum entrance tunnel size of eleven square inches. Entrance tunnels may be of any shape.
    - (ii) Each pot is required to have at least one escape exit of at least nine and one-half square inches in opening and which must be constructed of 120 thread size or smaller untreated cotton twine.
  - (c) Buoy requirements: Hag fish pot gear must be buoyed. Marker buoys must be floating and visible on the surface of the water, equipped with a pole, flag, radar reflector and operating light, and marked with the clear identification of the permittee. If ground lines are used, ground line end marker buoys must display the number of pots on the ground line.

It is unlawful to use gear that has one or more line marks or to use multicolor line consistent with requirements for any other state or federally managed commercial fishery operating in the U.S. West Coast Exclusive Economic Zone, or in the state waters of Washington, Oregon, or California.



## Dungeness Crab Electronic Monitoring Proposed Rule

## Small Business Economic Impact Statement

Final | June 12, 2023

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## List of Acronyms and Abbreviations

CP	Conservation Plan
EM	Electronic Monitoring
ITP	Incidental Take Permit
NAICS	North American Industrial Classification System
ORIA	Office for Regulatory Innovation and Assistance
RCW	Revised Code of Washington
RFA	Regulatory Fairness Act
SBEIS	Small Business Economic Impact Statement
U&A	Usual and Accustomed
QIN	Quinault Indian Nation
WAC	Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife

## Executive Summary

The Washington State Department of Fish and Wildlife (WDFW) is developing a proposed rule package that, 1) would require the installation and use of an electronic monitoring (EM) system on vessels participating in Washington's non-tribal coastal commercial Dungeness crab fishery<sup>1</sup>; 2) clarifies existing line marking and buoy color requirements; 3) would prohibit fishing line color or marking in coastal and Puget Sound fixed gear fisheries in a manner that is specified in another fishery; and 4) proposes administrative clarifications to commercial and recreational shellfish fishery rules. This analysis considers whether the proposed rule would result in more than minor costs as defined by RCW 19.85.020; whether it would have a disproportionate cost impact on small businesses as identified by RCW 19.85.040; and options for reducing the costs to small businesses as directed by RCW 19.85.030.

## Background

WDFW has identified a need for tools that can achieve accurate and timely accounting of effort (i.e., pots fished) by participants in the coastal commercial Dungeness crab fishery that include where, when, and how much fishing effort is occurring.<sup>2</sup> This need stems from WDFW's authority to manage this fishery within both state and federal waters off Washington's coast. WDFW's responsibility includes ensuring compliance with state regulations, obligations associated with co-management of the fishery with Tribal governments, and ensuring the fishery operates in compliance with the federal Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA). EM can improve WDFW's management of the fishery by enabling more accurate and timely information collection to ensure fishing is not occurring within closed areas or areas otherwise off-limits to non-tribal fishermen. The technology also allows WDFW to confirm that participants are not fishing prior to the opening of the season, are adhering to license-based or seasonal pot limits, and to gather additional information that may aid in identifying instances of gear tampering.

Large whales and marine turtles are among those species most affected by fishing gear entanglements, and these animals are federally protected under the MMPA and/or ESA. To address entanglement cases with marine mammals where the entangling gear is visible but cannot be used to confidently confirm the associated fishery, the National Marine Fisheries Service has indicated that lines marked in a way that is unique to each of the WDFW-managed crab fisheries would aid in achieving compliance with the MMPA and ESA. In 2020, the Washington Fish and Wildlife Commission adopted a regulation that requires state coastal crab fishers to mark the lines associated with pots with 12 inches of red in at least two places; at the bottom within one fathom from the crab pot, and at the top within one fathom of the main buoy. Marking in this manner supports positive attribution of gear to the fishery. A long-term objective is to expand requirements for unique line marks or colors to other Washington fisheries that use line as part of the gear configuration. In the near-term, attribution can be improved by prohibiting a fishery from using marks/line colors required in another fishery; other coastal states have implemented or intend to implement a similar rule. To effectively manage commercial and recreational shellfish fisheries, WDFW utilizes a variety of management measures relating to fishing area, gear, and catch reporting. As part of the proposed rule package, to improve management and enforcement

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<sup>1</sup> The waters surrounding Washington state also support other Dungeness crab fisheries, including Tribal fisheries, a non-tribal recreational fishery, and a commercial fishery in Puget Sound. The subject proposed rule applies only to the non-tribal commercial crab fishery occurring in the Pacific Ocean off Washington's outer coast.

<sup>2</sup> WDFW. 2022. Electronic Monitoring for Coastal Dungeness Crab Fishery Management. September 21. Downloaded from <https://wdfw.wa.gov/fishing/commercial/crab/coastal/letters-notices>, April 19, 2023.

capabilities, WDFW proposes administrative rule changes for coastal and Puget Sound recreational and commercial shellfish fisheries.

## Summary of Proposed Rule

WDFW is proposing a new rule for the Washington coastal commercial Dungeness crab fishery that would require installation and use of an EM system on all participating vessels. The proposed rule does not require use of a particular brand or model of system but identifies technical specifications that must be met by the system. These specifications include a data transmission “ping” rate of once every minute and use of a hydraulic pressure sensor set to record pressure readings once every 10 seconds. It further eliminates the requirement for maintaining and submitting paper logbooks, except in cases where someone is operating under a WDFW-approved exemption from the EM requirements due to system malfunction.

In addition, WDFW proposes modifications to existing rules across a suite of commercial and recreational shellfish fisheries in coastal waters and Puget Sound, and in the coastal commercial fishery for Pacific hagfish. These elements include a variety of other clarifications to simplify and enhance compliance with and enforcement of existing regulations and codify certain best practices that are already being implemented within fixed gear fisheries. These elements include the following:

- Clarifying that the existing requirement of two 12-inch red marks on coastal Dungeness crab lines must be *continuous*;
- Prohibiting the use of line marks or line color combinations in Washington fixed gear fisheries that are required for other state or federal fisheries<sup>3</sup>;
- Describing a management category of a “non-spot shrimp” complex to reduce the need to list each species in the complex individually;
- Specifying that the required creation and registration of a unique buoy color scheme for coastal and Puget Sound commercial Dungeness crab fishery participants must be completed annually;
- Clarifying that for commercial shrimp fisheries in Puget Sound, buoy color, already required to be orange, must be *solid* orange and for Puget Sound recreational shrimp pots, already required to be yellow, must be *solid* yellow;
- Standardizing recreational crab pot buoys color (red and white) for Puget Sound and the coast;
- Codifying the best practice across multiple fixed gear fisheries to use no more than the amount of line required to compensate for tides, currents, and weather; and
- Making several clarifying and simplifying changes for Puget Sound commercial crab and shrimp rules, including updates to outdated and/or incorrect boundary designations for commercial shellfish gear-specific management areas in Puget Sound, clarifying Puget Sound commercial logbook reporting requirements, updating commercial crab buoy tag replacement rules, and housekeeping clarifications stemming from electronic fish ticket implementation.

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<sup>3</sup> Fixed gear fisheries in Washington include any fisheries using lines to tether surface buoys to bottom deployed hooks, pots, or traps, such as sablefish longline, crab pot, shrimp pot, and hagfish pot.



## Need for an SBEIS

RCW 19.85 requires that the relevant agency prepare an SBEIS if the proposed rule “will impose more than minor costs on businesses in an industry.”<sup>4</sup> “Minor cost” is defined in RCW 19.85.020 as a cost per business that is less than 0.3 percent of annual revenue or income, or \$100, whichever is greater, or one percent of annual payroll.<sup>5</sup> This analysis relies on revenue data to define the minor cost threshold, as this information is more readily available than payroll data.

An evaluation by WDFW determined that the EM component of the proposed rule is the only element that would result in costs to businesses. The other elements of the rule package are not expected to result in costs to businesses. Therefore, this evaluation of whether the proposed rule is likely to result in more than minor costs is focused on the EM component of the rule package.

Data provided by WDFW indicates that the average annual ex-vessel revenues derived from coastal commercial crabbing for the past five years per license is \$277,060.<sup>6</sup> However, all fishery participants interviewed described that activity in other fisheries also contributes to their business revenues. Interviewees identified a range of annual revenues of between \$150,000 and \$500,000 for an average business participating in both Dungeness crabbing and other fisheries.<sup>7</sup> Based on this range of annual revenues, this analysis estimates a minor cost threshold of between \$450 and \$1,500 for affected businesses.<sup>8</sup> Given costs of compliance between \$1,830 to \$2,045 (see below), the proposed rule is expected to result in more than minor costs to businesses, necessitating the development of an SBEIS.

## Potentially Affected Businesses

The businesses affected by the EM element of the proposed rule include those that own and operate vessels that participate in the coastal commercial Dungeness crab fishery. These businesses include those that own or lease/fish any of the 223 valid limited entry commercial crab licenses. This analysis finds that up to 223 individual businesses may incur costs due to the proposed rule, as typically businesses own or lease a single license, and that generally these businesses are small (99.6 percent are small by Washington state’s definition).

## Cost of Compliance

The costs associated with installation and operation of an EM system include both start-up costs and costs that are incurred on a recurring basis (e.g., annually). These costs include the purchase and installation of the unit (start-up costs), the cost of a 5G cellular data plan, and the cost of maintenance (although maintenance costs would be covered by warranty in Year 1). The likely cost of complying with the rule ranges from \$1,830 to \$2,045 ( Table 1) in start-up costs to purchase and install the equipment and pay for the first year of the data plan. In subsequent years, costs would be on the order of \$450 to \$600 for maintaining the system and the data plan. Differences between the low and high end estimates are based on three factors: 1) whether the industry can organize to complete a bulk purchase of units to take advantage of bulk discount pricing, 2) whether the vessel

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<sup>4</sup> RCW 19.85.030 Agency Rules – Small Business economic impact statement reduction of costs imposed by rule. Accessed May 3, 2023, at: <https://app.leg.wa.gov/RCW/default.aspx?cite=19.85.030>.

<sup>5</sup> RCW 19.85.020 Definitions. Accessed May 3, 2023, at: <https://app.leg.wa.gov/rcw/default.aspx?cite=19.85.020>.

<sup>6</sup> Annual ex-vessel revenues for individual licenses range from \$4,505 to \$1.7 million over that time period.

<sup>7</sup> One individual identified an upper end revenue estimate of \$3 million for a small business in the industry. However, this estimate is substantially outside of the range provided by all other interviewees and is considered an outlier.

<sup>8</sup> The minor cost threshold used in this analysis is 0.3 percent of average annual revenues. The reported range represents 0.3 percent of \$150,000 (\$400) as a low end and 0.3 percent of \$500,000 (\$1,500) as a high end.

owner elects to install the unit him/herself or pay a third party to complete the installation, and 3) whether the vessel owner signs on for a data plan covering only the crabbing season, or for a complete year of data service.

**Table 1. Costs of Compliance**

Cost Element Per Unit	Cost in Year 1	Basis for Cost Range	Frequency of Cost
EM Unit	\$935 - \$975	Pricing provided by representative EM system manufacturer and vendor. Range represents individual unit price and price with bulk purchase discount.	Every 5-10 years
Installation	\$0 - \$300	Estimated based on industry interviews and estimate from representative EM system manufacturer and vendor. Range based on cost for vessel owner installation vs. use of a marine electrician/vendor-provided service technician (2-2.5 hours).	Every 5-10 years
Data Plan	\$295 - \$470	Pricing provided by representative EM system manufacturer and vendor. Range represents cost for crab season only vs. full year.	Annual
Maintenance	\$0	Routine maintenance covered by warranty during first year. After Year 1, recommended annual system checks estimated by representative EM system manufacturer and vendor at \$150.	Annual (after first year)
Total Cost in Year 1	\$1,830 - \$2,045		Year 1

Sources:

1. Interviews with industry representatives.
2. Price information provided by Archipelago Marine Research Ltd. via email to IEc, May 2, 2023.

## Summary Findings

Given the minor cost threshold of \$450 to \$1,500, the compliance costs of the proposed rule are likely to be more than minor for businesses in the industry. As the businesses in the coastal commercial Dungeness crab fishery are almost exclusively small businesses (fewer than 50 employees), this analysis finds that the proposed rule would have a disproportionate cost impact on small businesses. Given this finding, this analysis identifies potential mitigation options to defray the costs to small businesses. These include identifying technical specifications that allow for the cessation of the logbook requirements, allowing flexibility in the type of unit purchased, coordinating unit purchases to take advantage of bulk pricing, and allowing fishermen to revert to use of paper logbooks in cases of EM system malfunction.

## CHAPTER 1 | Introduction

This report evaluates the potential costs to businesses of compliance with a Washington State Department of Fish and Wildlife (WDFW) proposed rule that codifies a requirement for installation and use of an electronic monitoring (EM) system on all vessels participating in the non-tribal coastal commercial Dungeness crab fishery<sup>9</sup>, implements a variety of other clarifications to simplify and enhance compliance with and enforcement of existing regulations, and codifies certain best practices that are already being implemented within fixed gear fisheries. This Small Business Economic Impact Statement (SBEIS) was developed in accordance with the Regulatory Fairness Act (RFA), Revised Code of Washington (RCW) Section 19.85 to determine whether the proposed rule would result in more than minor costs as defined by RCW 19.85.020; whether it would have a disproportionate cost impact on small businesses as identified by RCW 19.85.040; and options for reducing the costs to small businesses as directed by RCW 19.85.030. The primary sources of information for this analysis include the following:

- Information gathered through outreach to businesses that would incur costs under the proposed rule, including those that have participated in a pilot program to test EM systems, and others with no prior experience using EM systems;
- Pricing information from the manufacturer and vendor of one system that would meet WDFW's technical specifications laid out in the proposed rule;<sup>10</sup> and
- Dungeness crab fishery license and ex-vessel revenue data provided by WDFW.

### 1.1 Need for the Rule

WDFW has identified a need for tools that can achieve accurate and timely accounting of effort by participants in the coastal Dungeness crab fishery that include where, when, and how much fishing effort is occurring.<sup>11</sup> This need stems from WDFW's authority to manage this fishery within both state and federal waters off Washington's coast. This responsibility includes ensuring compliance with WDFW's own regulations, obligations associated with co-management of the fishery with Tribal governments, and ensuring the fishery operates in compliance with the federal Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA).

Management of this fishery requires that WDFW be able to effectively and efficiently enforce regulations that dictate where and when fishing can occur, and the level of effort in terms of number of pots fished. EM can improve WDFW's ability to enforce its regulations by enabling collection of more accurate and timely information to ensure fishing is not occurring within closed areas, confirm that participants are not fishing prior to the opening of the season, confirming adherence to license-based or seasonal pot limits, and gather additional information that may aid in identifying instances of gear tampering.

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<sup>9</sup> The waters surrounding Washington state also support other Dungeness crab fisheries, including Tribal fisheries, a non-tribal recreational fishery, and a commercial fishery in Puget Sound. The subject proposed rule applies only to the non-tribal commercial crab fishery occurring in the Pacific Ocean off Washington's outer coast.

<sup>10</sup> As the lowest cost system tested by WDFW that would meet the technical specifications laid out in the proposed rule, this analysis assumes it is the system most fishery participants would purchase to comply with the rule.

<sup>11</sup> WDFW. 2022. Electronic Monitoring for Coastal Dungeness Crab Fishery Management. September 21. Downloaded from <https://wdfw.wa.gov/fishing/commercial/crab/coastal/letters-notices>, April 19, 2023.

WDFW co-manages the fishery with the Tribal governments whose usual and accustomed (U&A) fishing grounds are located on the outer coast of Washington. As a co-manager of the fishery, WDFW must ensure accurate reporting of where and when state-licensed fishermen are fishing, and that non-Tribal fishery participants do not cross into areas that are reserved for Tribal fishing only.

WDFW must also implement actions to reduce the entanglement of whales in Dungeness crab fishing gear. The EM system will more accurately identify the locations in which fishing gear is deployed thereby improving data inputs to models that estimate or predict the distribution and likelihood of co-occurrence. With such information, WDFW could consider management measures to reduce the amount of gear that could be deployed in areas of concern.

Finally, implementation of EM systems will improve WDFW's ability to manage the fishery with respect to biotoxins (particularly domoic acid). Specifically, a biotoxin event could result in a complete closure of the fishery but biotoxins don't always affect the entire coast. With EM, WDFW would have the ability to manage biotoxin events using area closures to prohibit the fishery in discrete areas affected by biotoxins. Like other area management needs, EM ensures fishing around biotoxin restricted areas is enforceable and protects public health.

WDFW is also proposing regulatory changes to enhance compliance with the federal ESA and MMPA. Large whales and marine turtles are among those species most affected by fishing gear entanglements, and these animals are federally protected under the MMPA and/or ESA. To address entanglement cases with marine mammals where the entangling gear is visible but cannot be used to confidently confirm the associated fishery, the National Marine Fisheries Service has indicated that lines marked in a way that is unique to each of the WDFW-managed crab fisheries would aid in achieving compliance with the MMPA and ESA. In 2020, the Washington Fish and Wildlife Commission adopted a regulation that requires state coastal crab fishers to mark the lines associated with each of their pots with 12 inches of red in at least two places; at the bottom within one fathom from the crab pot, and at the top within one fathom of the main buoy. Marking in this manner supports positive attribution of gear to the fishery. A long-term objective is to expand requirements for unique line marks or colors to other Washington fisheries that use line as part of the gear configuration. In the near-term, attribution can be improved by prohibiting a fishery from using marks/line colors required in another fishery; other coastal states have implemented or intend to implement a similar rule.

To effectively manage commercial and recreational shellfish fisheries, WDFW utilizes a variety of management measures relating to fishing area, gear, and catch reporting. As part of the proposed rule package, to improve management and enforcement capabilities, WDFW is also proposing administrative rule changes for coastal and Puget Sound recreational and commercial shellfish fisheries.

## 1.2 Summary of the Proposed Rule

The proposed rule requires installation and use of an EM system on vessels participating in the Washington coastal commercial Dungeness crab fishery. The proposed rule does not specify a particular brand or model of system that would be required, but instead, identifies technical specifications that must be met by the system. These specifications include a data transmission “ping” rate of once every minute, and use of a hydraulic pressure sensor set to record pressure readings once every 10 seconds. The proposed rule does not include a requirement for video monitoring, nor does it require the use of an electronic logbook. Finally, the proposed rule eliminates the requirement for completion and submission of a paper logbook, except where a vessel is operating under an exemption of the EM system requirements.

### Key Components of the EM Component of the Proposed Rule

- ✓ Requires installation and use of an EM system on all non-tribal coastal commercial Dungeness crab vessels.
- ✓ Outlines technical specifications that must be met by the EM system.
- ✓ Eliminates the requirement for maintaining and submitting paper logbooks.

In addition, WDFW proposes modifications to existing rules across a suite of commercial and recreational shellfish fisheries in coastal waters and Puget Sound, and in the coastal commercial fishery for Pacific hagfish. For commercial and recreational fixed gear fisheries in Puget Sound and non-crab fixed gear fisheries in the Pacific Ocean, this includes a requirement to use only the length of line necessary to compensate for tides, currents, and weather.

As previously described, coastal Dungeness crab lines must include two 12-inch red marks. The proposed rule clarifies that the red mark must be *continuous*.<sup>12</sup> The proposed rule would also prohibit the use of line marks or line color combinations in Washington fixed gear fisheries that are required for other state or federal fisheries.<sup>13</sup>

To simplify rulemaking, WDFW is proposing a new definition that describes a management category of shrimp species. Currently, there are six species of “non-spot shrimp” classified in Washington regulations and one spot shrimp that support significant recreational and commercial fisheries. The rule would define a “non-spot shrimp” complex and thereby reduce the need to list each species in the complex individually.

Establishing fishery specific colors for buoys is a common management tool for pot gear fisheries. Participants in the commercial Dungeness crab fishery are already required to create and register a unique buoy color scheme. However, the current rule is silent on the frequency with which buoy color schemes are to be registered. The proposed rule adds clarity by specifying an annual registration. The rule also clarifies that for commercial shrimp fisheries in Puget Sound, buoy color, already required to be orange, must be *solid* orange. A similar change for Puget Sound recreational shrimp pots specifies buoys must be *solid* yellow. The proposed rule also standardizes recreational crab pot buoys color (red and white) for Puget Sound and the coast.

The proposed rule package also includes several simplifying and clarifying rule changes for Puget Sound commercial crab and shrimp rules. These changes include updates to outdated and/or incorrect boundary designations for commercial shellfish gear-specific management areas in Puget Sound, clarifying Puget Sound

<sup>12</sup> This element is intended to ensure that individuals are not skirting the intent of the existing rule by, for example, using a single 12-inch zip tie attached to the line as a gear marking approach.

<sup>13</sup> Fixed gear fisheries in Washington include any fisheries using lines to tether surface buoys to bottom deployed hooks, pots or traps, such as sablefish longline, crab pot, shrimp pot, hagfish pot.

commercial logbook reporting requirements, and updating Puget Sound commercial crab buoy tag replacement rules.

### 1.3 Proposed Rule Elements Resulting in Costs to Businesses

Of the elements included within the proposed rule package, the requirements for installation and use of an EM system in the coastal commercial Dungeness crab fishery alone are expected to result in costs to businesses. These costs are identified and evaluated in detail in Chapter 2. Other rule components generally consist of clarifying existing regulations or codifying commonly implemented best practices. Compliance with these rule components is unlikely to result in costs. Table 2 identifies those rule elements that are not expected to result in costs to businesses and describes the basis for that conclusion.

The rule proposal requiring commercial Dungeness crabbers to register their buoy color schemes annually potentially affects crabbers that have previously only had to register buoys infrequently to maintain a unique color scheme associated with their license. However, to offset the impact of annual reporting, WDFW has developed an electronic form that replaces the more cumbersome existing process of attaching a photo to an email or mailing in a hard copy picture, resulting in no net costs associated with this element. Likewise, the rule elements specifying buoy colors across several recreational and commercial fisheries aligns regulations with long-standing practice in these fisheries and WDFW expects very few if any participants would need to replace existing gear to comply with the proposed rule. The proposed logbook rule reduces reporting requirements, and the buoy tag replacement rule shifts reporting from paper to an electronic form. Thus, the cost of compliance is either reduced or neutral for affected commercial fishers.

**Table 2. Rule Elements Not Expected to Generate Costs to Businesses**

Proposed Rule Elements	Relevant Fisheries	Costs to Businesses
Fishers must use only the amount of line necessary to compensate for tides, currents, and weather.	Recreational Crab, Shrimp & Crawfish Fisheries Puget Sound Commercial Dungeness Crab Fishery Commercial Shrimp Pot Fishery– Puget Sound Commercial Ocean Shrimp Pot Fishery Trial Commercial Hagfish Fishery	Rule element aligns regulations with long-standing practice in these fisheries.
It is unlawful to use gear that has one or more line marks consistent with requirements for any state or fed managed commercial fishery (in US) in the state waters of WA, OR, or CA.	Recreational Crab, Shrimp & Crawfish Fisheries Coastal Commercial Dungeness Crab Fishery Commercial Shrimp Pot Fishery– Puget Sound Commercial Ocean Spot Shrimp Pot Fishery Trial Commercial Hagfish Fishery	Rule element intended to preemptively prevent future conflicts when state line marking regulations are implemented.
There must be at least 12 inches of continuous red marks on every line in at	Coastal Commercial Dungeness Crab Fishery	Rule element clarifies existing regulation and is intended to

least two places no more than one fathom from the main buoy and from the pot.		correct future misinterpretation. Fishers are generally in compliance with the intent of the current regulation.
Recreational shrimp buoys must be solid yellow or solid fluorescent yellow. Commercial Shrimp Pot Fishery in the Puget Sound buoys must be solid orange.	Recreational Crab, Shrimp & Crawfish Fisheries Commercial Shrimp Pot Fishery- Puget Sound	Rule element aligns regulations with long-standing practice in these fisheries and WDFW expects very few if any participants would need to replace existing gear to comply with the proposed rule.
Buoys in the Puget Sound or Coastal Commercial Crab fisheries can't be both red and white in color unless a minimum of 30% of the surface is also marked with another color(s) other than red or white.	Coastal Commercial Dungeness Crab Fishery Puget Sound Commercial Dungeness Crab Fishery	No additional costs as red and white buoys are not widely used in these fisheries.
The license holder must register the buoy brand and buoy color(s) to be used with the license annually.	Coastal Commercial Dungeness Crab Fishery Puget Sound Commercial Dungeness Crab Fishery	Crabbers that have previously only had to register buoys infrequently to maintain a unique color scheme will have to increase the frequency of their registration. However, costs will be offset by implementation of a mobile app that replaces the more cumbersome existing process of attaching a photo to an email or mailing in a hard copy picture. The net costs of this rule element are zero.
Clarifying and simplifying changes including updates to outdated and/or incorrect boundary designations for commercial shellfish gear-specific management areas in Puget Sound, clarifying Puget Sound commercial logbook reporting requirements, and updating commercial crab buoy tag replacement rules.	Recreational Crab, Shrimp & Crawfish Fisheries Coastal Commercial Dungeness Crab Fishery Puget Sound Commercial Dungeness Crab Fishery Commercial Shrimp Pot Fishery- Puget Sound Commercial Ocean Spot Shrimp Pot Fishery	Rule element clarifies and simplifies existing regulations and would not result in changes in behavior or associated costs.

## 1.4 Requirement for Developing an SBEIS

19.85 RCW requires that the relevant agency prepare an SBEIS if the proposed rule “will impose more than minor costs on businesses in an industry.”<sup>14</sup> “Minor cost” is defined in RCW 19.85.020 as a cost per business that is less than 0.3 percent of annual revenue or income, or \$100, whichever is greater, or one percent of annual payroll.<sup>15</sup> This analysis relies on revenue data to define the minor cost threshold, as this information is more readily available than payroll data.

As described previously, WDFW has found that the EM component of the proposed rule is the only element that would result in costs to businesses; the other rule proposals in the package are not expected to result in costs to businesses. Therefore, the evaluation of whether the proposed rule is likely to result in more than minor costs is focused on the EM component of the rule package and the industry expected to incur costs as a result of the rule.

The estimate for average annual revenues for businesses in the coastal commercial Dungeness crab industry is based on ex-vessel revenue data provided by WDFW and information provided by industry representatives. Data provided by WDFW indicates that the average annual ex-vessel revenues derived from coastal commercial crabbing only for the past five years per license is \$277,060.<sup>16</sup> However, all fishery participants interviewed described that fishing activity in other fisheries also contribute to the revenues of their business. Interviewees identified a range of annual revenues of between \$150,000 and \$500,000 for an average business participating in both Dungeness crabbing and other fisheries.<sup>17</sup> Based on this range of annual revenues, this analysis estimates a minor cost threshold of between \$450 and \$1,500 for affected businesses (Table 3).<sup>18</sup> As described in Section 2.2, the likely cost of complying with the proposed rule ranges from \$1,830 to \$2,045. These costs are identified as more than minor, requiring development of an SBEIS.

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<sup>14</sup> RCW 19.85.030 Agency Rules – Small Business economic impact statement reduction of costs imposed by rule. Accessed May 3, 2023, at: <https://app.leg.wa.gov/RCW/default.aspx?cite=19.85.030>.

<sup>15</sup> RCW 19.85.020 Definitions. Accessed May 3, 2023, at: <https://app.leg.wa.gov/rcw/default.aspx?cite=19.85.020>.

<sup>16</sup> Ex-vessel revenues for individual licenses range from \$4,505 to \$1.7 million over that time period.

<sup>17</sup> One individual identified an upper end revenue estimate of \$3 million for a small business in the industry. However, this estimate fell substantially outside of the range provided by all other interviewees and was excluded from the analysis.

<sup>18</sup> The universe of affected businesses does include a single business, Pacific Seafood, that represents a different industry than those primarily affected by this rule (NAICS code 424460 – Fish and Seafood Merchant Wholesalers). Given annual revenues of over \$1 billion, the minor cost threshold for businesses affected in this industry would be substantially higher (personal communication with Pacific Seafood representative in May 2023). However, this single affected business within this industry is not small given employment of over 3,000 people (Pacific Seafood. 2023. Pacific Seafood Homepage. Viewed at <https://www.pacificseafood.com/>, April 22, 2023; Interview with Pacific Seafood representative, April 26, 2023).



## CHAPTER 2 | Small Business Impacts

This chapter evaluates the potential economic impacts of the proposed rule on small businesses in Washington State. The requirements for the SBEIS are included in RCW 19.85.30 and 19.85.040.<sup>19</sup> This analysis also utilizes the guidance and resources provided by Washington State’s Office for Regulatory Innovation and Assistance (ORIA).<sup>20</sup> Per the SBEIS *Frequently Asked Questions* guidance, agencies are required to consider “costs imposed on businesses and costs associated with compliance with the proposed rules.”<sup>21</sup> Agencies are not required under 19.85 RCW to consider indirect costs not associated with compliance with the rule.<sup>22</sup>

As outlined in the RFA and in accordance with other guidance and best practices, this SBEIS addresses the following questions.<sup>23,24, 25</sup>

- What are the industries and universe of businesses that may incur costs as a result of this rule?
- What are the likely costs of the rule to those businesses?
- Are the costs resulting from the rule anticipated to be more than minor?
- Will the rule disproportionately affect small businesses?
- What steps has the agency taken to reduce the costs of the rule on small businesses?
- How has the agency involved small businesses in the development of the rule?
- How many jobs may be created or lost as a result of compliance with the rule?

The sections that follow address each of these questions.

### 2.1 Potentially Affected Small Businesses

As described in Chapter 1, the proposed rule includes minor changes and clarifications to existing rules which will help stakeholders better understand regulations. These other rule elements are not expected to result in additional costs. As such, this section focuses on the EM element of the proposed rule.

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<sup>19</sup> RCW 19.85.040 Small business economic impact statement—Purpose—Contents. Accessed May 3, 2023, at: <https://app.leg.wa.gov/RCW/default.aspx?cite=19.85.040>

<sup>20</sup> ORIA. 2021. Regulatory Fairness Act Support. Accessed May 3, 2023, at: [https://www.oria.wa.gov/site/alias\\_\\_oria/934/regulatory-fairness-act-support.aspx](https://www.oria.wa.gov/site/alias__oria/934/regulatory-fairness-act-support.aspx).

<sup>21</sup> WA Attorney General Office. 2021. Small Business Economic Impact Statements – Frequently Asked Questions. Accessed May 3, 2023, at: [https://www.oria.wa.gov/Portals/\\_oria/VersionedDocuments/RFA/Regulatory\\_Fairness\\_Act/DRAFT\\_SBEIS\\_FAQ.pdf](https://www.oria.wa.gov/Portals/_oria/VersionedDocuments/RFA/Regulatory_Fairness_Act/DRAFT_SBEIS_FAQ.pdf).

<sup>22</sup> ORIA. Undated. “Regulatory Fairness Act: 19.85 RCW.” Presentation provided to IEc by ORIA staff on August 19, 2021.

<sup>23</sup> RCW 19.85.040 Small business economic impact statement—Purpose—Contents. Accessed October 13, 2022 at: <https://app.leg.wa.gov/RCW/default.aspx?cite=19.85.040>.

<sup>24</sup> ORIA. 2021. Regulatory Fairness Act Support. Accessed October 13, 2022 at: [https://www.oria.wa.gov/site/alias\\_\\_oria/934/regulatory-fairness-act-support.aspx](https://www.oria.wa.gov/site/alias__oria/934/regulatory-fairness-act-support.aspx).

<sup>25</sup> WA Attorney General Office. 2021. Small Business Economic Impact Statements – Frequently Asked Questions. Accessed October 13, 2022 at: [https://www.oria.wa.gov/Portals/\\_oria/VersionedDocuments/RFA/Regulatory\\_Fairness\\_Act/DRAFT\\_SBEIS\\_FAQ.pdf](https://www.oria.wa.gov/Portals/_oria/VersionedDocuments/RFA/Regulatory_Fairness_Act/DRAFT_SBEIS_FAQ.pdf).

The universe of businesses affected by the proposed rule include those engaged in the non-tribal commercial harvest of Dungeness crab on the Washington coast. These businesses fall within the North American Industry Classification System (NAICS) code 114112, Shellfish Fishing.<sup>26</sup> However, as this code includes a substantial number of other types of fisheries and businesses (e.g., oyster, clam, shrimp), the number of businesses identified under this code is not representative of the affected industry. A more accurate identification of potentially affected small businesses considers more specifically those businesses participating in the coastal non-tribal Dungeness crab fishery.

The coastal Dungeness crab fishery is a limited entry fishery with a hard cap of 223 licenses.<sup>27</sup> Some of these licenses are fished by the license holder while others are leased to other individuals who generally fish the license using their own vessel.<sup>28</sup> Industry representatives identified that it is most likely the vessel owner, rather than the license owner, that would incur the costs of installation, maintenance, and operation of an EM system.<sup>29</sup>

Identification of the number of small businesses affected by the proposed rule is complicated by the fact that data are not available to identify the number or ownership of vessels that participate in the fishery. As such, we rely on license data provided by WDFW and information provided by industry representatives to make a conservative assumption regarding the number of businesses potentially affected by the rule. Interviews with industry participants suggest that most businesses within the industry that own or lease a Dungeness crab license own a single vessel that would require the EM system described in the proposed rule.<sup>30</sup> As such, this analysis assumes that each license is associated with a single vessel that represents a business affected by the rule, and that each license is likely to be fished at some point in the years following regulation. Accordingly, we anticipate 223 businesses would be affected by the rule, as shown in Table 3.<sup>31</sup>

Small businesses are defined as those that employ less than 50 people. Industry representatives indicate that affected businesses (i.e., vessel owners) may employ between one and three crew seasonally and, therefore, all would be considered small businesses, with one exception. Pacific Seafood is the owner of at least one vessel that participates in this fishery and would be a business affected by the proposed rule. As a company with upwards of 3,000 employees, Pacific Seafood is defined as a large business by the state's definition.<sup>32, 33</sup>

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<sup>26</sup> The universe of affected businesses does include a single business, Pacific Seafood, that represents a different industry than those primarily affected by this rule (NAICS code 424460 – Fish and Seafood Merchant Wholesalers). However, this single affected business within this industry is not small given employment of over 3,000 people (Pacific Seafood. 2023. Pacific Seafood Homepage. Viewed at <https://www.pacificseafood.com/>, April 22, 2023; Interview with Pacific Seafood representative, April 26, 2023).

<sup>27</sup> License data provided by WDFW via secure server on April 25, 2023.

<sup>28</sup> Interviews with industry representatives conducted during April 2023.

<sup>29</sup> The requirement to install EM systems on commercial crab vessels would increase the cost of fishing for affected businesses. In theory, this increased cost could result in individuals ceasing to fish, ceasing to lease licenses, or decrease the amount they are willing to pay to lease a license. However, the value of Dungeness crab fishing licenses and demand for them indicate these outcomes are unlikely (Interviews with industry representatives conducted during April 2023).

<sup>30</sup> Although interviewees identified that at least one business, Pacific Seafood, may be the owner of multiple vessels fishing within the fishery, a representative of the business confirmed only a single vessel owned by the company is currently participating in this fishery (Interview with representative of Pacific Seafood, May 3, 2023).

<sup>31</sup> To the extent that a business owns more than one vessel, this analysis underestimates the costs of the proposed rule to that business. However, the best available information suggests that the substantial majority if not all businesses in this industry own only one vessel and would thus incur costs associated with installation of an EM system on a single vessel.

<sup>32</sup> Pacific Seafood. 2023. Pacific Seafood Homepage. Viewed at <https://www.pacificseafood.com/>, April 22, 2023; Interview with Pacific Seafood representative, April 26, 2023.

<sup>33</sup> License data provided by WDFW indicate that at least one other business identified as large by WDFW standards owns a license to participate in this fishery. However, available information did not suggest that this business owns vessels operating within the fishery. We therefore conclude it would not incur costs as a result of this rule.

Table 3. Number of Affected Small Businesses and Minor Cost Threshold

	Number of Licenses <sup>1</sup>	Number of Businesses <sup>2</sup>	Number of Businesses that are Small	Percent of Businesses that are Small	Average Annual Revenues	Minor Cost Threshold
Total	223	223	222	99.6%	\$150,000-\$500,000	\$450 - \$1,500

## Notes:

1. License data provided by WDFW via secure server on April 25, 2023.
2. Number of businesses based on assumption that each license is associated with a single vessel and single business.

## 2.2 Cost of Compliance

Consistent with RCW 19.85.030(1)(a), this analysis evaluates the relevance of the following potential categories of costs to comply with the proposed rule:

- Reporting, recordkeeping, and other compliance requirements.
- Professional services that a small business is likely to need in order to comply with such requirements.
- Costs required to comply with the proposed rule, including costs of equipment, supplies, labor, professional services, and increased administrative costs.
- Based on input received, determine whether compliance with the rule will cause businesses to lose sales or revenue.

### Key Findings

- ✓ Costs of compliance includes the cost of the EM system, installation, and a 5G data plan.
- ✓ Costs of annual maintenance would be incurred after the first year.
- ✓ Some costs would only be incurred at start-up (e.g., cost of unit) while others such as the data plan and maintenance would be incurred annually or as needed.
- ✓ The total cost of the proposed rule in Year 1 following implementation is \$1,830 - \$2,045 per business.

The costs associated with installation and operation of an EM system include both start-up costs, and costs that are incurred on a recurring basis (e.g., annually). As such, costs of the EM system will differ depending on which year is being observed for cost estimates. This analysis considers the costs that would be incurred during the first year of operation which is expected to be the year of greatest compliance costs. The costs of the proposed rule are summarized in **Error! Reference source not found.**

Table 4. Cost of Compliance

Cost Element Per Unit	Cost in Year 1	Basis for Cost Range	Frequency of Cost
EM Unit	\$935 - \$975	Pricing provided by representative EM system manufacturer and vendor. Range represents individual unit price and price with bulk purchase discount.	Every 5 to 10 years
Installation	\$0 - \$300	Estimated based on industry interviews and estimate from representative EM system manufacturer and vendor. Range based on cost for vessel owner installation vs. use of a marine electrician/Archipelago service technician (2-2.5 hours).	Every 5-10 years
Data Plan	\$295 - \$470	Pricing provided by representative EM system manufacturer and vendor. Range represents cost for crab season only vs. full year.	Annual
Maintenance	\$0	Routine maintenance covered by warranty during first year. After Year 1, recommended annual system checks estimated by representative EM system manufacturer and vendor at \$150.	Annual (after first year)
<b>Total Cost in Year 1</b>	<b>\$1,830 - \$2,045</b>		<b>Year 1</b>

Sources:

1. Interviews with industry representatives.
2. Price information provided by Archipelago Marine Research Ltd. via email to IEc, May 2, 2023.

### 2.2.1 Start-Up Costs

Start-up costs associated with compliance with the proposed rule are the purchase of the EM system itself and the cost of installation. The estimate of the unit cost is based upon a low-cost existing product that currently meet all requirements set forth through the proposed rule. This system has been tested by industry participants and confirmed by WDFW to be a sound option for regulated businesses.<sup>34</sup>

The cost of the EM system could range from \$895 to \$975. Costs of an individual EM unit are currently \$975.<sup>35</sup> The low-end cost derives from the possibility of a bulk purchase, which would decrease the cost per unit resulting in a price as low as \$895 if over 300 units were purchased. A bulk order of between 200 and 299 units would result in a cost per unit of \$935.

The installation cost will range from \$0 to \$300. The low end of \$0 assumes that vessel owners install both the EM unit and the hydraulic transducer themselves.<sup>36</sup> Other vessel owners may hire a marine electrician or

<sup>34</sup> Email communication from WDFW to IEc, April 6, 2023.

<sup>35</sup> The pricing for the unit hardware is based on estimates provided by Archipelago Marine Research Ltd., and includes the FishVue LIME control center, a 5,000 PSI hydraulic pressure transducer, BRNKL security and monitoring features, shipping, and a one-year warranty.

<sup>36</sup> Several industry participants interviewed indicated they would likely install the unit themselves, and one representative system vendor confirmed that many of their past customers are able to and choose to do so.

manufacturer to install the unit at an hourly rate. Given a likely installation time of between 2 and 2.5 hours,<sup>37</sup> and a per hour cost of \$120,<sup>38</sup> this analysis estimates a high-end cost for installation of \$300.

These costs represent the expected costs for the first year in which the EM system is required. In years in which the system would need to be replaced (estimated to be approximately five to 10 years from initial installation<sup>39</sup>), costs would be similar to the initial start-up costs quantified in this analysis.

### 2.2.2 Recurring Costs

Recurring costs are costs incurred each year for continued compliance with the proposed rule and would include the monthly data plan charges and any necessary maintenance. The cost of the monthly 5G data plan has a range that will depend on the situation of the vessel and their use of the EM. One manufacturer, Archipelago Marine Research Ltd., will offer a month-to-month subscription at a cost of \$69/month. Another plan option would include use only during the Dungeness crab fishing season at a cost of \$295 for the season. Lastly, for any vessel that wishes to have access to the EM system and its capabilities year-round, the annual cost is \$470. This analysis assumes most participants would choose a plan that covers the complete Dungeness crab fishing season or entire year, resulting in a cost range of \$295 to \$470/year.

Any EM system maintenance costs in the initial year are mostly likely covered by product warranty.<sup>40</sup> In later years, maintenance costs would be dependent upon the issue being addressed. One manufacturer recommends that the unit undergo an annual routine check to make sure that the system is performing properly at an estimated cost of about cost of \$150 per year for this optional service.

### 2.2.3 Other Identified Potential Costs

In addition to the costs identified above, industry interviewees identified several other costs they believe could result from the proposed rule. However, for the reasons described below, the analysis finds that these types of costs are unlikely to result from the proposed rule.

- **Potential for lost time fishing/revenue associated with system malfunction.** Interviewees expressed concern that in the event of a system malfunction, fishing activity might need to cease until system function could be restored. WDFW has expressed that in the event of an inoperable system, the captain could receive an exemption permit from WDFW revert to completion of a paper logbook to track fishing activity, allowing fishing to continue.<sup>41</sup> As a result, we do not identify this factor as a cost of the proposed rule.
- **Potential for lost time fishing/revenue associated with operating out of cellular coverage.** Several interviewees identified that they often fish in areas outside of cellular coverage. They expressed concern that operating in these areas could be considered out of compliance with the proposed regulations if data were not being transmitted in real-time to WDFW. One manufacturer, Archipelago Marine Research Ltd., confirmed that the EM system is designed to store data and transmit them when the unit re-enters

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<sup>37</sup> Interview with representative of Archipelago Marine Research Ltd. on April 28, 2023.

<sup>38</sup> Interviews with industry representatives conducted during April 2023.

<sup>39</sup> Interview with representative of Archipelago Marine Research Ltd. on April 28, 2023.

<sup>40</sup> This would be true for the representative system considered in this analysis from Archipelago Marine Research Ltd.

<sup>41</sup> Personal communication with WDFW staff, March 29, 2023.

cellular service range. WDFW has confirmed that this situation would be in compliance with the proposed rule.<sup>42</sup> As a result, we do not anticipate these types of costs to result from the proposed rule.

- **Potential for lost time fishing/revenue associated with limited availability of marine electricians in certain areas.** At least one interviewee expressed concern that the limited availability of marine electricians in certain areas could mean that wait times for unit installation could be long, which might delay the start of the fishing season for some vessels. One EM system manufacturer, Archipelago Marine Research Ltd., confirmed that their own technicians are made available to install any purchased units, and that there would not be significant wait times for installation. We anticipate it is unlikely for these types of costs to result from the proposed rule.

## 2.3 Cost Mitigation Strategies

When a rule is expected to disproportionately impact small businesses, RCW 19.85.030 requires the agency to consider methods for reducing the impact of the rule on small businesses. These methods may include decisions that were made in determining the provisions of the rule itself, or opportunities to reduce the costs of implementing the rule as written. This section outlines existing and proposed opportunities for offsetting compliance costs, as well as the steps WDFW has taken to limit the costs of the proposed rule to businesses.

- **Required Technical Specifications.** In identifying the technical specifications for an EM system that would be required by the proposed rule, WDFW designed the specifications to allow for discontinuation of current logbook requirements.
- **Choice in Systems.** Rather than dictate a requirement that a specific brand/type of system be installed on each vessel, WDFW instead has identified technical specifications the system must meet, providing each business with flexibility in selecting from several possible systems from different suppliers across a spectrum of price points.
- **Costs of System Malfunction.** Interviewees expressed concern about the potential for lost revenues should a malfunction of the EM system require suspension of fishing activities. It is WDFW's intent to allow fishermen to revert to use of paper logbooks via a WDFW-approved exemption permit in the event of an EM system failure, allowing fishing activity to continue assuming appropriate action is being taken to get the EM system back online.
- **Bulk Pricing.** The cost analysis assumes that each business would individually purchase the EM unit and annual data plan. However, coordinated purchase of the units (e.g., by crab industry associations) would result in a bulk purchase discount. For example, Archipelago Marine Research Ltd. offers a discounted pricing option for purchases of between 100 and 199 units (\$955 plus \$470 Data Plan), or for between 200 and 299 units (\$935 plus \$470 Data Plan).
- **Financial Support.** Interviewees expressed that WDFW should consider grant or financial aid opportunities to the fleet to offset the costs of the proposed rule.

RCW 19.85.030(2) specifies options that the agency must consider in mitigating rule costs. Table 5 specifies each type of cost mitigation opportunity identified in the RCW and how WDFW considered them during the rulemaking process.

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<sup>42</sup> Written communication from WDFW staff, May 19, 2023.

Table 5. Assessment of Cost Mitigation Opportunities Outlined in RCW 19.85.030

RCW 19.85.030 (2) Requirements	Cost Mitigation Opportunities
a) Reducing, modifying, or eliminating substantive regulatory requirements	<p>WDFW is not including video monitoring at this time as a system requirement, reducing costs of the system itself, and associated with implementing new technology (e.g., more complex technology such as video monitoring could mean increased opportunity for technical problems that could be costly and time-intensive to resolve).</p> <p>EM system specifications designed to allow fishery participants to discontinue the presently required use of paper logbooks.</p>
b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements	<p>EM system specifications designed to allow fishery participants to discontinue the presently required use of paper logbooks.</p> <p>Relative to buoy color scheme registration requirements, WDFW has developed a mobile application that replaces the more cumbersome process of attaching a photo to an email or mailing in a hard copy picture to WDFW.</p>
c) Reducing the frequency of inspections	Not applicable.
d) Delaying compliance timetables	WDFW is delaying the implementation date for EM beyond the implementation date for other proposed rule elements.
e) Reducing or modifying fine schedules for noncompliance	WDFW Enforcement will use reasonable discretion in issuing fines for non-compliance as the EM program gets underway.
f) Any other mitigation techniques, including those suggested by small businesses or small business advocates.	<p>Should a vessel experience technical difficulties with its EM system, WDFW will allow the vessel via an exemption permit to continue fishing using a paper logbook. This will avoid costs in the form of reduced revenue resulting from system failure.</p> <p>Coordination of EM system purchases to take advantage of bulk pricing opportunity.</p> <p>Grant or other financial aid opportunities to offset costs of the rule.</p>

## 2.4 Involvement of Small Businesses in Rule-Making Process

This section describes how WDFW sought to engage affected parties, including small businesses, in the rulemaking process, including in the development of the SBEIS.

### 2.4.1 Involvement in Rulemaking

The proposed rule would affect businesses engaged in the coastal commercial Dungeness crab fishery. For nearly ten years, WDFW has worked closely with the industry to discuss the potential for an EM program for the fishery. The concept of an EM program was first introduced to the Washington Coastal Dungeness Crab Advisory Board (Advisory Board), an advisory body comprising fishermen from across the industry, around 2010. WDFW and Quinalt Indian Nation (QIN) shellfish management staff had attended a presentation by the Canadian Crab Fishermen's Association at Nanaimo, British Columbia regarding the implementation of EM in their fishery. WDFW managers noted the potential of EM to support regulatory measures such as pot limits, season delays, and area closures being undertaken to achieve harvest sharing under tribal-state co-management agreements. WDFW presented the concept to the Advisory Board, but it was not well received. Objections to EM included excessive government oversight, costs, and potential for equipment malfunction. The QIN proceeded to implement EM for their fleet in 2015.

In the meantime, EM became a frequent topic at both Advisory Board meetings and state-tribal meetings. With the QIN EM program in place, state crab fishers began to recognize possible benefits including the potential to investigate or dispel allegations of gear tampering, the potential to lessen the need for reliance on special management areas open exclusively to tribal participants thereby allowing more in-common fishing opportunity between state and tribal fleets, and the potential to manage area closures associated with biotoxin events. Responsive to this interest, WDFW sought grant funding for a pilot project to test EM in 2016 and 2017 without success. WDFW continued to pursue funding options and in 2020 received a grant from the National Fish and Wildlife Foundation to begin a collaborative pilot project working with volunteers from coastal crab fishery participants. For the initial phase of the project, two vessels were outfitted with EM equipment; later the project expanded to include ten vessels.

Besides the EM benefits crab fishers began to acknowledge, in a tandem process, WDFW managers identified EM as a component of the coastal fishery's Conservation Plan (CP). Spurred by incidences of whale entanglements with Dungeness crab gear along the U.S. west coast, WDFW notified the National Marine Fisheries Service of its intent to apply for an Endangered Species Act Section 10 Incidental Take Permit (ITP) for the Washington coastal commercial Dungeness crab fishery in 2018. The CP is the first step in achieving an ITP. Given the complexity of this effort, WDFW held numerous Advisory Board and public meetings to engage with and keep fishery participants apprised of CP development. These meetings afforded opportunity to share findings on the EM project and to receive input on technical as well as practical considerations. Comment and feedback at these meetings were used to guide and refine development of the proposed EM system specifications, regulations, and timing for implementation.

Key outreach activities and points of involvement of the industry in the rulemaking process to date are summarized in



## Table 6.

The elements of the proposed rule that are not expected to result in costs for the coastal commercial Dungeness crab fishery and other coastal commercial fixed gear fisheries were presented at many of the same meetings listed in Table 5 and in the Washington Coastal Dungeness Crab Newsletter. Similarly, all but some minor elements of the proposed rules that are not expected to result in costs for Puget Sound shellfish fisheries were communicated by WDFW via email and discussed with industry representatives at multiple public industry meetings since Spring 2022.

**Table 6. WDFW Outreach Activities for Development of Electronic Monitoring System Program and Proposed Rule**

Date	Activity
March 19, 2019	Presentation on EM options at WDFW workshop with crab industry
April 24, 2019	WDFW workshop with crab industry agenda included further discussion on EM
August 15, 2019	Coastal Crab Advisory Board Meeting agenda included discussion on EM Pilot Project
April 30, 2020	Conservation Plan Update, agenda included discussion on EM program, Coastal Crab Industry Webinar
July 29, 2020	Coastal Crab Advisory Board Webinar agenda included discussion on EM program
December 3, 2020	Coastal Crab Advisory Board Webinar agenda included update on EM Pilot Project,
December 10, 2020	Presentation: "Conservation Plan Update" at the Coastal Crab Industry Meeting included EM in presentation
February 19, 2021	Letter to Coastal Crab Fishery Participants providing information on the February 26, 2021, Washington Fish and Wildlife Commission Meeting
February 26, 2021	Presentation: "Update: Coastal Commercial Dungeness Crab Conservation Plan Progress" to Washington Fish and Wildlife Commission, Public meeting, EM addressed in presentation
May 13, 2021	Coastal Crab Advisory Board Webinar agenda included update on EM Pilot Project
October 28, 2021	Coastal Crab Advisory Board Webinar agenda included update on EM Pilot Project
September 21, 2022	Presentation "Electronic Monitoring for Coastal Dungeness Crab Fishery Management" at the Coastal Crab Industry Meeting
November 22, 2022	Presentation of the 2023 Rule Package to the Coastal Commercial Dungeness Crab Advisory Committee Meeting
February 2023	Update on development of the EM program in the First Edition of the Washington Coastal Dungeness Crab Fishery Newsletter
March 23, 2023	Coastal Crab Advisory Board Webinar agenda included update on EM
May 11, 2023	Industry meeting to discuss rulemaking and implementation of EM in the coastal commercial Dungeness crab fishery

### 2.4.2 Involvement in SBEIS Development

To collect information to inform development of this SBEIS, IEc reached out to 15 individuals representing businesses that would incur costs as a result of the proposed rule. Each prospective interviewee received an email followed by a text message in cases where the potential interviewee did not respond to the email. For individuals that were unresponsive to the first two contact attempts, IEc made one final attempt to reach them by text. Ultimately, IEc conducted interviews directly with eight industry representatives (including the one large business license holder), as well as two other individuals identified as having information potentially relevant to

the analysis.<sup>43</sup> One interviewee subsequently discussed the proposed rule and interview questions with two additional industry representatives and provided the results of those conversations to IEc, effectively bringing the total number of individuals from whom information was collected to 12. Targets for outreach represented a distribution of businesses across multiple variables including geographic area of operation, participation in other fisheries (e.g., Oregon Dungeness crab, black cod), and whether or not they participated in the EM pilot program. It also included individuals representing varied business arrangements, including individuals that own both their vessel and a crab license and fish in the fishery, those that own a vessel but lease a crab license, and those that own both licenses and vessels but employ crew and captains to operate those vessels/fish those licenses. Following the interview guide provided as Attachment A, IEc sought input from affected businesses and others, as appropriate, regarding the nature and magnitude of costs that could result from the proposed rule, the structure of the industry and identification of entities that would likely incur the costs of the rule, and ideas and opportunities that WDFW might consider to mitigate rule costs.

## 2.5 Jobs Created or Lost

Compliance costs are relatively low compared to average annual revenues, and interviewees identified that the costs associated with the rule were not expected to be substantial from a business perspective. The small businesses in this industry may have between approximately two and five seasonal employees that work as crew on the fishing vessels, and the proposed rule is unlikely to influence jobs in the industry.

Compliance with the proposed rule may result in a temporary uptick in business for marine electricians operating in coast ports. However, as the need for this service would only be one-time, and businesses may complete the unit installation themselves, it is unlikely this element of the proposed rule would result in job creation.

## 2.6 Summary Conclusions

The likely cost of complying with the rule ranges from \$1,830 to \$2,045 in start-up costs to purchase and install the equipment and pay for the first year of the data plan. In subsequent years costs would be on the order of \$450 to \$600 for maintaining the system and the data plan. The start-up costs of the rule could represent up to one percent of annual revenues (assuming the lowest end of the revenue range and highest end of the cost range). Given the minor cost threshold of \$450 to \$1,500, the costs of the proposed rule are expected to generate more than minor costs to businesses in the industry. As over 99 percent of businesses affected by the proposed rule are small, the proposed rule would disproportionately affect small businesses.

As the potential exists for more than minor costs to be incurred by businesses as a result of the proposed rule, and because small businesses are expected to be disproportionately impacted in cases where costs are incurred, WDFW has identified several potential mitigation options to defray the impacts to small businesses. These include allowing flexibility in the type of unit purchased to comply with the proposed rule, coordinating unit purchases to take advantage of bulk pricing, and allowing fishermen to revert to use of paper logbooks in cases of EM system malfunction.

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<sup>43</sup> In addition to interviews with affected businesses, IEc also conducted data collection interviews with a representative of the Quinalt Indian Nation, which has had previous and ongoing experience using EM with its Dungeness crab fishery, and with Archipelago Marine Research Ltd., the creator and distributor of one representative EM system that would meet the technical specifications laid out in the proposed rule.

## References

D&B Hoovers business database. Queried April 20, 2023.

Interviews with industry representatives conducted by IEc, April 2023.

Personal and email communication with Archipelago Marine Research Ltd. representative, May 1, 2023 and May 3, 2023.

Personal and email communication with WDFW staff, March, April and May 2023.

RCW 19.85

RCW 19.85.020

RCW 19.85.030

RCW 19.85.040

WDFW Coastal Commercial Dungeness Crab License data provided by WDFW via secure server on April 25, 2023.

WDFW Ex-Vessel Revenue Data provided by WDFW via secure server on April 25, 2023.

## ATTACHMENT A | Interview Guide

### Introduction (for all Interviewees)

- IEC is an environmental and economic consulting firm with expertise in developing regulatory analyses for state and federal agencies.
- IEC has been retained by the Washington Department of Fish and Wildlife to develop a Small Business Economic Impact Statement for a forthcoming proposed rule that would require Dungeness crab fishing vessels to implement Electronic Monitoring (EM).
- The SBEIS considers whether the rule will impose more than minor costs on businesses in the industry and, if so, whether those costs would disproportionately affect small businesses (defined as businesses employing <50 people).
- Our analysis is focused on understanding the nature of and costs to businesses in the Dungeness crab fishery. We are conducting a series of interviews with industry representatives to collect this information.

### Dungeness Crab Fishermen

1. Can you describe your activities as a participant in the coastal Dungeness crab fishery (how many years, where do you fish, do you own or lease your license)?
2. Do you own the boat(s) you use?
  - a. How many boats do you operate/own?
  - b. Is this a typical arrangement for how participants operate in this fishery or is there a wide variety?
3. Are the businesses that incur costs related to the vessels (e.g., requirement to install electronic monitoring) generally small businesses (i.e., fewer than 50 employees)?
4. Are you familiar with the proposed rule that DFW is presently developing?
5. Do you or have you used EM?
6. What is your understanding of the costs of EM systems? Do you have information beyond what has been provided by DFW on the cost of the EM (e.g., purchase price, installation costs, annual maintenance costs)?
7. Who is most likely to bear the costs of the EM (e.g., license holder, boat owner, other)?
8. Outside of these types of costs, do you foresee any other potential costs that may result from a requirement to install and use an EM system?
9. Do you anticipate a difficulty in learning how to maintain/operate the EM once installed?
10. Do you believe it will be more or less time intensive than keeping a logbook?
11. How long does it currently take to fill out your logbook for a fishing day (approximate hours)?

12. Do you own a smartphone device that has service in the areas you fish that you would use in congruence to the EM?
13. Other thoughts/comments regarding the rule?

## Fishermen Participating in the EM Trial

1. Can you describe your activities as a participant in the Dungeness crab fishery (how many years, locations fished, do you own or lease your license)?
2. Do you own the boat(s) you use?
  - a. How many boats do you operate/own?
  - b. Is this a typical arrangement for how license holders operate in this fishery or is there a wide variety?
3. Are the businesses that incur costs related to the vessels (e.g., requirement to install electronic monitoring) generally small businesses (i.e., fewer than 50 employees)?
4. Are you familiar with the proposed rule that DFW is presently developing?
5. Do you have information on the cost of the EM (e.g., purchase price, installation costs, annual maintenance costs)?
6. Who is most likely to bear the costs of the EM (e.g., license holder, boat owner, other)?
7. What was your experience with the electronic monitoring system?
  - a. Did you find it or the smartphone app difficult to use?
8. What was the EM like in comparison to using your logbook every day?
  - a. What is the level of effort required to conduct regular reporting between these two methods?
9. Do you expect other Dungeness Crab license holders to have a similar experience with the EM as you?
10. Outside of these types of costs, do you foresee any other potential costs that may result from a requirement to install and use an EM system?
11. Other thoughts/comments regarding the rule?

## Dungeness Crab Association Heads

1. Are you familiar with the forthcoming proposed rule?
2. Can you describe the Dungeness crab fishing industry a bit?
  - a. How many license holders?
  - b. Are license holders and/or vessel owners generally small businesses (fewer than 50 employees)?
  - c. Do license holders generally own their own boats? If yes, how many?

- d. Who do you expect is likely to bear the costs of purchasing, installing and maintaining the EM equipment (e.g., license holder, boat owners, other)?
3. Do you have information on the costs of EM for the fishery?
  - a. Potential costs outside of the purchase, installation, and maintenance of the EM?
4. How does the EM compare to the use of logbooks for recording and reporting purposes?
  - a. What is the relative level of effort across the two methods?
  - b. Does the industry have particular preferences/concerns with respect to EM versus logbooks?
5. Other thoughts/comments regarding the rule?







*Washington  
Department of*  
**FISH and  
WILDLIFE**

Washington  
Coastal Dungeness Crab Fishery

**Electronic Monitoring Program  
Compliance Guide**

This compliance guide was prepared by WDFW to provide a summary of how vessel operators can comply with regulations implementing electronic monitoring in the Washington coastal Dungeness crab fishery (WAC 220-340-420). The statements in this document are intended solely as guidance. Any discrepancies between this guide and WAC 220-340-420 will be resolved in favor of WAC 220-340-420.

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# 1 Introduction

The purpose of this guide is to help participants in the Washington coastal Dungeness crab fishery understand how to comply with electronic monitoring (EM) regulations (WAC 220-340-420). Section 1 provides general information, including who to contact for help. Section 2 provides EM system purchase and installation information. Section 3 details vessel operator responsibilities and tasks. Section 4 describes two types of exemption permits in case of technology failures or emergencies, and how to obtain them, and Section 5 describes the steps to take when departing the fishery.

## 1.1 What is EM?

EM is a vessel monitoring system that automatically determines a vessel's position using global positioning system (GPS) coordinates, records individual pot retrieval via a hydraulic pressure reading, and transmits this information to an EM service provider. These systems are similar to satellite VMS required for participation in some federal fisheries but provide more accurate and timely data to meet coastal crab fishery management needs at a lower cost.

## 1.2 When is EM Required?

Any vessel designated to a Washington coastal Dungeness crab license that is used to commercial fish for coastal Dungeness crab shall have on board an EM system that is operated consistent with WAC 220-340-420 section (12) while fishing for coastal Dungeness crab. Commercial crab fishing is defined in [WAC 220-340-400](#): as any taking, fishing, use, or operation of gear to fish for crab for commercial purposes, and includes the possession of crab on the water for commercial purposes, and the landing or initial delivery of crab for commercial purposes. In short, if you have crab on board or crab gear in the water you are commercially fishing for Dungeness crab and would be required to have an operational EM system activated 24 hours a day.

## 1.3 Who is responsible for installing EM?

The operator of the vessel designated to the commercial coastal Dungeness crab license is responsible for ensuring an operational EM system is active on a vessel commercial fishing for Dungeness crab.

## 1.4 Contact Information

For assistance contact the EM Program Team and/or the EM Program Manager. [Activation reports \(Section 3.2\)](#), and [requests for exemption permits \(Section 4\) or Long-term Departure reports \(Section 5\)](#) will be submitted using the EM Program Team email below.

### EM Program Team

48 Devonshire Road, Montesano, WA 98563

Phone: 360-249-4628

Email: [coastal.crab.EM@dfw.wa.gov](mailto:coastal.crab.EM@dfw.wa.gov)

### EM Program Manager

Robert Morgan

Phone: 360-480-8596

Email: [Robert.morgan@dfw.wa.gov](mailto:Robert.morgan@dfw.wa.gov)

# 2 EM System Purchase and Installation

The operator of a vessel designated to a coastal Dungeness crab license that participates in the coastal commercial Dungeness crab fishery, shall obtain an EM system and have it installed on board the vessel

designated to the coastal Dungeness crab license (WAC 220-340-420). EM system installation and operation should be in accordance with the instructions provided by the EM system provider and recommendations in sections 2.1 and 2.2.

## **2.1 System Requirements**

Please review WAC 220-340-420 for all EM system requirements, here is clarifying information for some requirements:

- Provide a feedback mechanism to indicate to the vessel operator that the system is operational. This could be light, function test, mobile application, or other way to alert the operator that the system is working properly.
- Have a hydraulic pressure sensor installed in the hydraulic line supplying the crab block where commercial Dungeness crab gear is hauled so that increases in pressure from gear hauling would be recorded during commercial crab fishing. The pressure sensor should be installed in between the crab block and first fitting in the hydraulic line. Installing the hydraulic pressure sensor in a way that would prevent the system from determining hydraulic pressure readings would be a violation of WAC 220-340-420.
- Accurately record a vessel's activity 24 hours per day while commercial crab fishing. WDFW recognizes that data capture could be subject to failures beyond a vessel operators control such as cellular service disruptions, device failure, etc.

## **2.2 EM Provider Recommendations**

To meet requirements of WAC 220-340-420, vessel operators need to ensure the systems and service providers can:

- Record and relay the data fields listed in Table 1 to the Pacific States Marine Fisheries Commission (PSMFC) whenever a new system is installed, or new data transmissions begin.
- Record and relay the data fields listed in Table 2 to PSMFC at least once every hour. If an EM system can determine when a vessel is moored, defined as transmitting from the same location for more than one hour or in a geographic area known as the vessels usual mooring station, the EM system provider may automatically decrease the data recording rate to at least once every hour as defined in WAC 220-340-420 (b)(i)(F). Once a vessel becomes unmoored, the recording rate shall revert to at least once every minute as defined in WAC 220-340-420 (b)(i)(A)(D). Make data accessible to PSMFC through an Application Programming Interface (API) or a similar option providing automated data access.
- Maintain adequate customer service to keep systems operational and respond to service requests within 24 hours.
- Maintain the confidentiality of location data and personal information of participating vessels and operators.
- Provide service reports to the WDFW EM Program on system failures.

**Table 1. Required Vessel EM Device Data Fields**

Data Field Name	Description	Data Type	Example
VESSEL_CG_NUMBER	Coast guard vessel number	Text	123456
VESSEL_STATEREG_NUMBER	State vessel registration number	Text	12345
REG_STATE	State of registration	Text	WA
LOGGER_ID	Serial number or unique identifier linked to EM device - defined by the vendor	Text	AB123456
VENDOR_NAME	EM service provider information	Text	Acme Fishing Services
UNIT_TYPE_NAME	Name of the make/model of device - defined by the vendor	Text	Track Checker 2
START_DATE	Date system was installed or started transmitting data	Date	2022-11-01
END_DATE	Date system was removed or stopped transmitting data	Date	2022-12-01

**Table 2. Required Location, Pressure, and Speed Data Fields**

Data Field Name	Description	Data Type	Units	Example
LOGGER_ID	Serial number or unique identifier linked to EM device - defined by the vendor	Text		AB123456
DATE_TIME		DateTime	Pacific local time	2023-03-30 04:56:31.000
LATITUDE		Numeric	Decimal Degrees	46.907273
LONGITUDE		Numeric	Decimal Degrees	-124.108898
PRESSURE_1	From hydraulic pressure sensor	Numeric	PSI	387.5
PRESSURE_2	Only required if multiple pressure sensors are needed	Numeric	PSI	275.75
SPEED	Calculated from distance/time between previous GPS location	Numeric	NM	5.5
VESSEL_NAME		Text		Miss Fish

### 2.3 Installation Recommendations

During installation, the vessel operator should be available to assist the EM service provider in determining the best wiring routes, hydraulic pressure sensor location, and location of the unit itself. Initial installation will take approximately 4-5 hours. No standard installation configuration will cover all participating Dungeness crab vessels. Vessel operators will need to work with providers to customize installation of EM equipment and wiring based on individual vessel needs that meet all conditions of the most current Compliance Guide. Some EM providers provide instructions for operators to install EM

systems themselves to save on installation costs. Note, it is required for vessel operators to make the EM system available for inspection by WDFW Enforcement personnel, USCG personnel, or any authorized officer according to WAC 220-340-420(12)(b)(viii).

## 2.4 EM Provider Contact Information

A list of EM system providers that can potentially meet WDFW’s system requirements are listed in Table 3.

**Table 3. EM System Providers**

Company Name	Device	Contact Email	Contact Number
Archipelago Marine Research	FishVue LIME	<a href="mailto:info@archipelago.ca">info@archipelago.ca</a>	<b>(250) 383-4535</b>
Woods Hole Group	WD 300 Sentry		<b>(508) 540-8080</b>
Viatrax	Command	<a href="mailto:support@viatrax.com">support@viatrax.com</a>	<b>(918) 824-1400</b>
This list is not comprehensive and other EM system providers may be available. If you are an EM system provider that can meet the EM system requirements and are interested in being added to this list contact: <a href="mailto:coastal.crab.EM@dfw.wa.gov">coastal.crab.EM@dfw.wa.gov</a>			

## 3 Operational EM Requirements

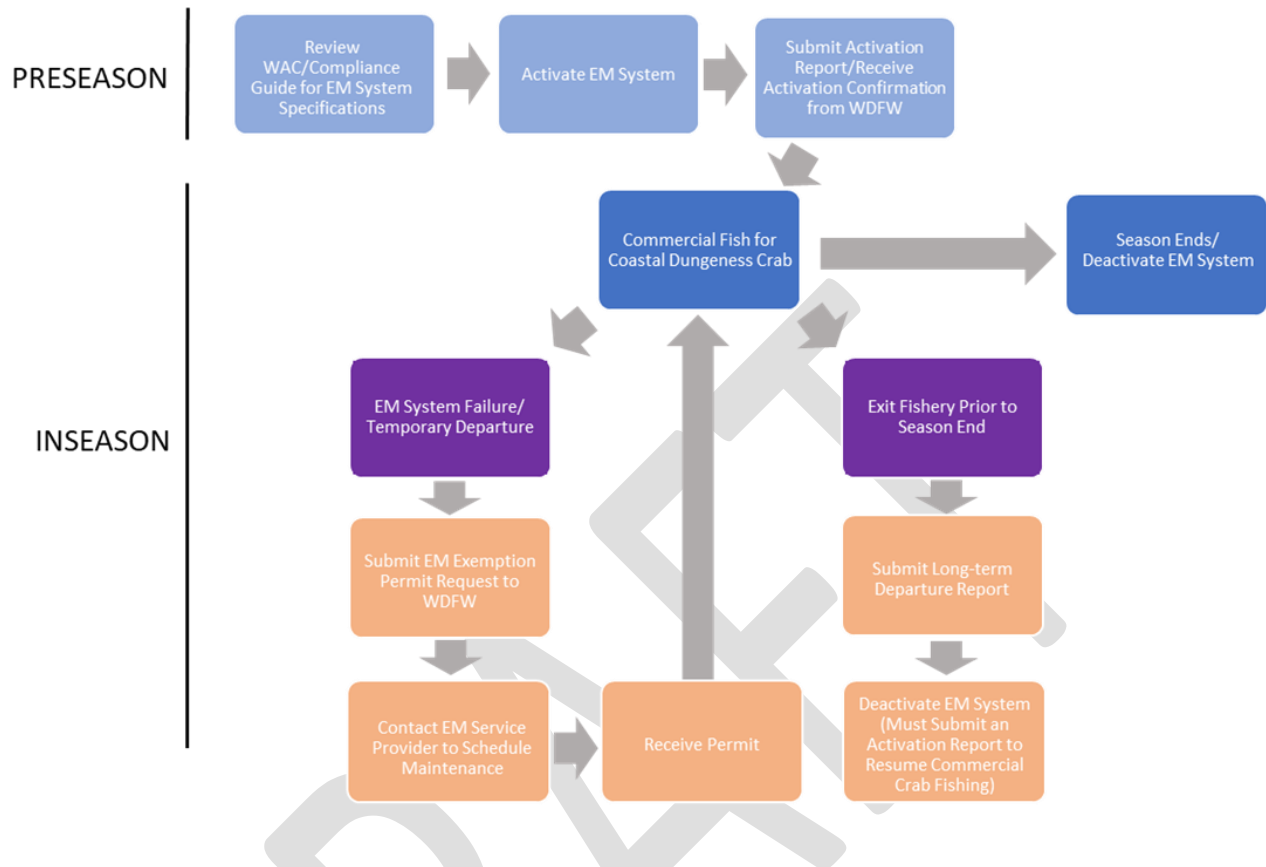
This section will help vessel operators determine what is necessary to be compliant with EM regulations while operating a commercial Dungeness crab vessel.

### 3.1 General Requirements

Vessel operators will need to:

- Ensure all charges levied by the service provider are paid as necessary to ensure continuous operation of the EM system.
- Make the EM system available for inspection by WDFW Enforcement personnel, USCG personnel, or any authorized officer.
- Ensure that the EM system is not tampered with, disabled, or destroyed and is operated, and maintained according to the EM system provider instructions.
- Follow the EM procedures outlined in Figure 1 and sections 3-5

**Figure 1. EM System Procedures**



### 3.2 Activation Reports

After initial installation, and prior to the start of every coastal Dungeness crab season, ensure the unit is supplied power and activated. Check the EM device’s feedback mechanism to determine if the device is in proper working order. This may be located on a separate app, a light on the device, etc. Once this is done the vessel operator must submit an EM Activation Report to the EM Program Team either by mail or email. EM Activation Reports can be obtained by contacting the EM Program Team or online at: <https://wdfw.wa.gov/fishing/commercial/crab/coastal>. The EM Program Team will provide confirmation that your system is working to the preferred contact method listed on the EM Activation report. Note, it could take 5 days to receive the required confirmation from WDFW.

Vessel operators will need to submit an activation report prior to the start of every coastal Dungeness crab season **and** when:

- Initially installing or reinstalling an EM system.
- Switching EM service providers.
- Resuming fishing operations after submitting a long-term departure exemption report.
- Making any changes to the information contained in the EM Activation Report (this includes when designating a new vessel to a coastal Dungeness crab license).

### 3.3 Pre-trip check

Before each trip and prior to leaving port, the vessel operator needs to ensure the EM system is operational by checking the device’s feedback mechanism. If the system is not operational the vessel operator should follow the EM service provider’s basic troubleshooting instructions. If the vessel operator cannot resolve the issue, they should immediately contact their EM service provider for maintenance and must immediately contact WDFW staff for an EM system failure exemption permit by following the instructions in the Temporary EM Exemption Permit section (4) of this guide.

### 3.4 During the trip

While fishing, the vessel operator is expected to perform system maintenance including checking that the system is still functioning, ensuring that the EM system is not tampered with, disabled, or destroyed and is operated, and maintained according to the EM system provider instructions. If the vessel operator determines the EM system has failed during a trip, they should immediately contact their EM service provider for maintenance and must immediately contact WDFW staff for an EM system failure exemption permit following the instructions in **Section 4** of this guide.

### 3.5 Between trips

The vessel operator must ensure the system remains on and is fully operational between trips.

### 3.6 End of Season

The vessel operator must leave the EM system on and may only turn off the system after their last WA Dungeness crab landing of the season and all gear has been removed from the water. If the current WA coastal Dungeness crab season is still underway, a long-term departure report must be received by WDFW. See **Section 5** for information on long-term exemption reports.

Do I need an EM Exemption Permit or a Long-term Departure Report?	
EM Exemption Permit	Long-term Departure Report
<ul style="list-style-type: none"><li>• EM System Failure</li><li>• Emergency (fire, flooding, etc.) that deactivates the EM system for less than 14 days</li><li>• Haul out/shipyard work lasting less than 14 days when power will be cut to the EM system</li><li>• Any other scenario that causes a break in the transmission of data from, or loss of power to, an EM system while commercial crab fishing</li></ul>	<ul style="list-style-type: none"><li>• Pulled all D. crab gear and do not intend to commercial fish for D. crab for the remainder of the season</li><li>• Emergency (fire, flooding, etc.) that deactivates the EM system for more than 14 days</li><li>• Haul out/shipyard work lasting more than 14 days when power will be cut to the EM system</li></ul>



## 4 EM Exemption Permits

A vessel must be equipped and operate with an EM system continuously 24 hours a day when fishing in the coastal Dungeness crab fishery. Vessels may be temporarily exempted from this requirement if a valid WDFW EM Exemption Permit is received from WDFW and the vessel is in compliance with all conditions and requirements of the EM system exemption identified in WAC 220-340-420 (b)(v). EM Exemption Permits are valid for 3 days. After 3 days, vessel operators must request an extension or submit a long-term departure report (see Section 5). Vessel operators must fill out an electronic or paper logbook while operating under an EM Exemption Permit and must submit them within 10 days of any landing while commercial crab fishing without an operational EM system. In addition, vessel operators must use navigational equipment (including, but not limited to, chart plotters, hand-held GPS units, cell phone, etc.) to record a track line of the vessel's movements while commercial crab fishing, and this information must be made immediately available to WDFW Enforcement Officers upon request and retained for 30 days from the date the EM Exemption Permit expired.

### 4.1 When is a permit required?

An EM Exemption Permit is needed when:

- A vessel has an EM system failure that cannot be resolved immediately.
- A vessel is informed of a system failure by WDFW staff or the EM service provider.
- The vessel will be hauled out of the water but intends to resume commercial crab fishing in the same season.
- An emergency incapacitates the vessel, but the vessel intends to resume commercial crab fishing after resolving the situation.

### 4.2 EM System Failure Exemption Permit:

Vessels may be temporarily exempted from EM system requirements in situations due to EM system failure or interruption by obtaining an EM System Failure Exemption Permit. This includes failures to the hydraulic pressure sensor, GPS location systems, or any other part of the EM system that prevents data transmission.

### 4.3 Haul Out Exemption Permit

This permit is required if a vessel operator intends to cut power to the EM system in the process of hauling the vessel out for various reasons such as, routine maintenance, shipyard work, etc. and intends to resume fishing in the current coastal Dungeness crab season. Otherwise, a long-term departure report must be submitted.

### 4.4 Emergency Exemption Permit

Vessels that experience an emergency including but not limited to fire, flooding, or extensive physical damage to critical areas may request an Emergency Exemption Permit. This permit is only required if the vessel operator intends to resume participation in the current coastal Dungeness crab season following vessel repair. Otherwise, a long-term departure report must be submitted.

## **4.5 Obtaining an exemption permit**

EM System Failure Exemption Permits are available 24 hours a day:

[Placeholder for link and QR code](#)

Submit the form to receive a confirmation email. This confirmation email is your permit and will need to be presented to WDFW enforcement if requested.

For Haul Out and Emergency Exemption Permits, contact the EM Program Team. The EM Program Team will respond to these requests during normal business hours. This allows for additional time to be added to the permit when operators know they will not be fishing for more than the 3 days issued in the automatic form. If you need an EM Exemption Permit to immediately fish for commercial crab please use the online form!

## **4.6 How to reactivate an EM system before an exemption expires**

If the situation for which an exemption was issued is resolved before the exemption expires, the vessel operator must notify the EM Program Team to confirm the system is operational. Please include the vessel name, WA coastal Dungeness crab license number, and estimated time the vessel intends to resume fishing. If the vessel is required to submit an activation report due to a change in EM system ID or other reason, that report will substitute for the notification.

## **4.7 EM exemption permit extension**

If the situation for which an exemption was issued cannot be resolved before the exemption expires, contact the EM Program Team to get an extension before your permit expires. Do not submit a new exemption permit request. Extensions will not be granted unless a vessel operator can demonstrate that they have attempted to resolve the issue or can verify a service call is scheduled to resolve the issue.

# **5 Long-term Departure Reports**

Long-term departure reports are submitted when a vessel no longer intends to commercially fish for Dungeness crab in the current season.

## **5.1 When to submit a long-term departure report**

A report would need to be submitted anytime a vessel plans on not participating in the fishery for an extended period before the current season has ended. For example, a vessel operator that pulls all their crab gear and goes to participate in another fishery would have to submit a departure report. If a vessel participates until the season ends on Sept 15<sup>th</sup> a departure report would not need to be submitted.

## **5.2 How to submit a long-term departure report**

Departure reports can be submitted by phone or email by contacting the EM Program Team and providing the vessel name, coastal Dungeness crab license number and date of departure from the fishery. The departure date would be the date of the vessel's last landing or the date the last of the vessel's gear was removed from the water, whichever is later.

### **5.3 How to participate in the fishery after submitting a departure report**

If a vessel intends to resume fishing within the same season at a later date and after submitting a departure report, the vessel operator must submit a new activation report.

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