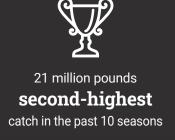


Washington Coastal Dungeness Crab Fishery Newsletter

In this newsletter you will find important information on the 2024-25 Washington coastal commercial crab season and a recap of the 2023-24 season.





90.7% of harvest

in two months (February - March)





34% more crab caught than previous 10-season average Stormie B

Fishing vessel Stormie B in Westport. Photos by WDFW except where noted.

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2023-24 season summary

A season of high abundance and prices

The Washington coastal Dungeness crab fishery had a total catch of over 21 million pounds during the 2023-24 season, exceeding the previous 10-season average by more than 5.3 million pounds. Included in this total were 3.45 million pounds in tribal landings and 17.57 million pounds in landings by state crabbers. The 2023-24 season landing total represented a 26.9% decrease from the 2022-23 season, which ended with a record 28.7 million pounds caught coastwide, and a 34% increase from the previous 10-season average.

Coastal crab landings have steadily increased over the past 30 years, despite significant interannual variability throughout the fishery's recorded history (Figure 1).

Commercial harvest by tribal and state crabbers during the 2023-24 season was the sixth-largest catch within the fishery's history and the second-highest crab abundance observed within the past 10 seasons.

The 2023-24 Washington coastal Dungeness crab season had the second-highest ex-vessel value on record (Figure 2). The total ex-vessel value of state landings exceeded \$66.8 million, surpassed only by a record of \$88.2 million set during the 2021-22 season (\$94.7 million in 2024 dollars when adjusted for inflation).

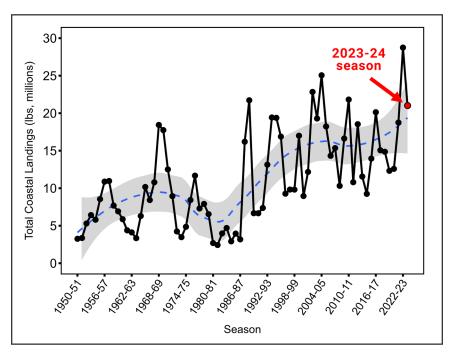


Figure 1. Historical Dungeness crab landings for the Washington Coast by season (tribal and state fisheries; millions of pounds), 1950-51 to 2023-24.

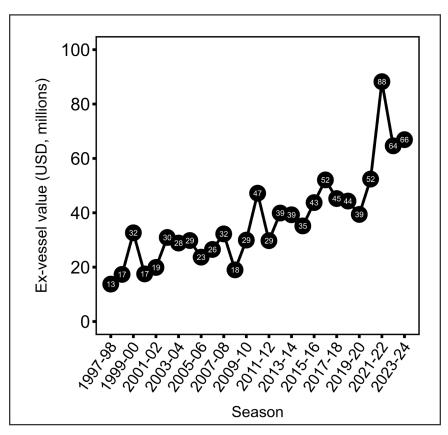


Figure 2. Historical total state ex-vessel value for the Washington coastal Dungeness crab fishery, 1997-98 to 2023-24.

The average price per pound for the 2023-24 season was \$3.81, with the highest monthly average of \$5.70 observed in April (Figure 3). The 2023-24 season price average was lower than six of the previous 10 seasons, due in part to the fact that 90.7% of landings took place within February or March. The average per pound price during the summer fishery remained above \$4.60, representing a substantial increase from previous seasons.

During the 2023-24 season, 201 coastal Dungeness crab license holders made 4,432 landings into Washington (Vessels – Figure 4A; Landings – Figure 4B). Participation within the 2023-24 season represented an increase from the previous year, which saw 194 vessels make landings. The estimated maximum number of crab pots deployed during the season peak was 87,100, which was similar to the past 10-season average of 83,670 (Crab pots – Figure 4A).

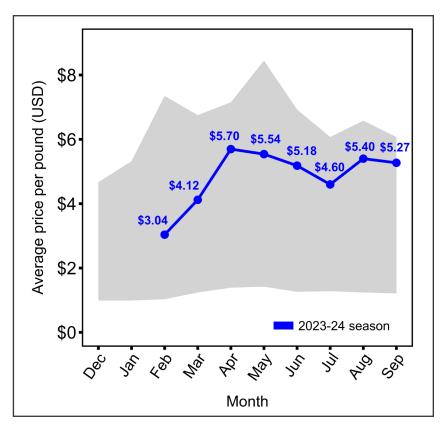


Figure 3. The monthly average per pound price received for Dungeness crab, as reported on fish receiving tickets. Gray shading represents the minimum and maximum average monthly price paid in past seasons (1997-98 to 2022-23). The blue line indicates the average monthly price received within the 2023-24 season.

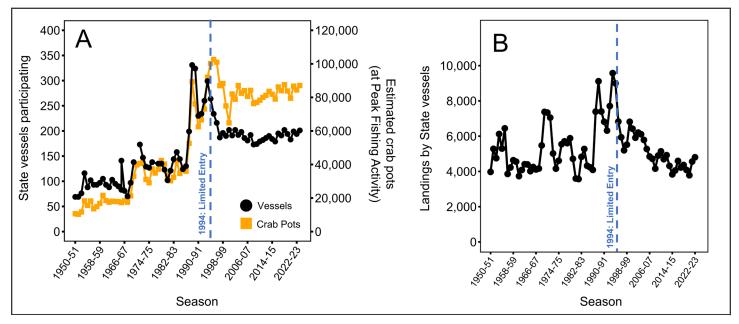


Figure 4. (A) The total number of state vessels that made landings (black circles) and the estimated number of crab pots deployed during peak fishing activity (orange squares). (B) Historical landings by state vessels within the Washington coastal Dungeness crab fishery by season. Totals are provided for the 1950-51 to 2023-24 seasons. The blue vertical dashed line indicates the year that a limited entry license program was implemented within the fishery.

Fire at Ilwaco Landing posed a challenge to crabbers preparing gear

Before the start of Washington's 2023-24 coastal commercial Dungeness crab season, a Jan. 22 fire at Ilwaco Landing destroyed an estimated 3,700 crab pots, affecting seven Washington-licensed vessels. In response, the Washington Department of Fish and Wildlife (WDFW) swiftly worked to replace lost buoy tags for affected gear. Additionally, beginning May 8, WDFW issued gear recovery permits with special requirements: any gear recovered with replacement tags or tags belonging to the affected vessels was to be surrendered to WDFW staff or enforcement upon return to port. WDFW then facilitated the return of recovered gear to the original owners, marking an exception to standard permit procedures.

Late start and pot limits implemented at the start of the season

The Washington coastal Dungeness crab fishery can open as early as Dec. 1, but can be delayed for various reasons. The 2023-24 season opened to the state fleet on Feb. 1, 2024. In consultation with Tri-

State fishery managers within Washington, Oregon, and California, the decision to delay the season in the area from Cape Falcon, OR, to Klipsan Beach, WA, including the Columbia River and Willapa Bay, was made based on indicators of poor crab condition persisting into late winter in Washington test areas. The season opener north of Klipsan Beach to the U.S.-Canada border, including Grays Harbor, aligned with the southern opener, resulting in a coastwide opening date of Feb. 1. Fair-start provisions delayed the movement of vessels that participated in any area south of Cape Falcon prior to the opening of the area north of Cape Falcon for 30 days.

The 2023-24 season opened with a reduced pot limit coastwide in Washington; licensed vessels with permanent pot limits of 500 or 300 were limited to 400 or 250 pots, respectively. On March 2, 2024, pot limits were lifted for any vessel fishing in areas exclusively outside of the Quinault Indian Nation's usual and accustomed fishing area (QIN U&A). On March 25, 2024, the remaining pot limits inside the QIN U&A were lifted.

Table 1 shows state catch within each Washington catch reporting area by month during the 2023-24 season. The distribution of crab caught within each area was similar to other seasons over the

	Washington Catch Reporting Area							
Month	59A-1	59A-2	60A-1	60A-2*	60B	60C	61	Total
February	48,050	229,256	1,528,907	8,597,825	84,087	803,818	2,174,835	13,466,778
March	46,378	92,137	358,202	1,320,934	46,716	145,192	464,348	2,473,907
April	11,877	56,035	103,513	349,347	68,511	30,434	169,736	789,453
May	6,148	12,417	39,834	62,158	113,583	2,993	22,515	259,648
June		4,659	32,257	22,944	75,112	4 775	5,543	146,375
July	F 221		37,281	29,835	100,545		2 270	173,558
August	5,231	2,672	38,338	55,413	83,322	4,775	3,278	180,862
September			8,729	27,849	39,307		0	76,295
Total	117,684	397,176	2,147,061	10,466,305	611,183	987,212	2,840,255	17,566,876

Table 1. State catch within each WDFW catch reporting area during the 2023-24 coastal Dungeness crab season. *Landings from catch area 60D (Columbia River) were combined with the total from area 60A-2 to protect the privacy of vessels participating in this area. Refer to Figure 5A for the locations of catch reporting areas.

past decade, with most of the landings by the state fleet (59.1%) harvested between Point Chehalis and the Washington-Oregon border (Figure 5B; catch area 60A-2). The second-highest crab catch was observed south of the Washington-Oregon border (16.2%; area 61), followed by catch between Point Chehalis and Point Grenville (12.2%; area 60A-1).

Catch north of Point Grenville to the U.S.-Canada border remained low during the 2023-24 season, with catch reported in 59A-1 and 59A-2 representing approximately 3% of the coastal total. The total poundage of crabs caught north of Point Grenville has declined significantly over the past decade, especially when compared with seasons within the late 1990s and early 2000s in which these areas produced 19-36% of the coastal total (1997-98 to 2007-08 seasons; Figure 5B).

Catch within Grays Harbor (60B) increased by 129% when compared with the 2022-23 season, due in part to historically high fishing activity within the bay in July and August (Table 1).

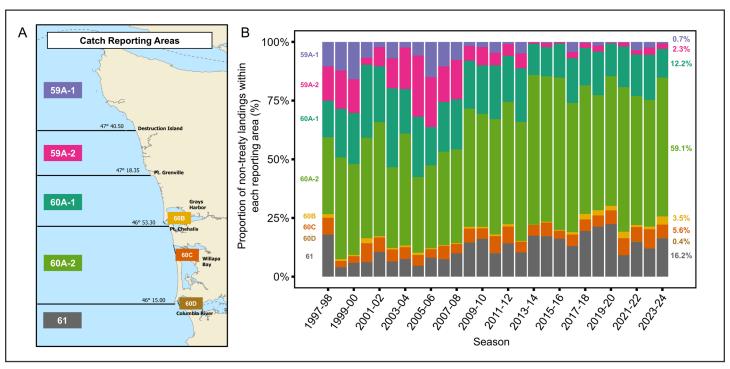


Figure 5. (A) WDFW catch reporting areas. (B) Proportion of state Dungeness crab landings for the 2023-24 season by catch reporting area (colors correspond to those indicated in panel A).

Catch area reporting

Catch data reported on state fish tickets forms the foundation for harvest sharing, which is required for comanagement. During the 2023-24 season, 11.1% of fish tickets were found to have misreported catch totaling 937,000 pounds. WDFW staff contacted crabbers and buyers to ensure fish ticket errors were corrected and to prevent future errors. Buyers and vessel operators who sign fish tickets are responsible for accurately reporting all information, including catch area(s). When fishing in two or more reporting areas during a single trip, crabbers must provide the amount caught in each catch area to the buyer at the time of the landing. Figure 6 includes a detailed map of WDFW commercial crab catch reporting areas.

WDFW Coastal Dungeness Crab Fish Ticket Catch Areas

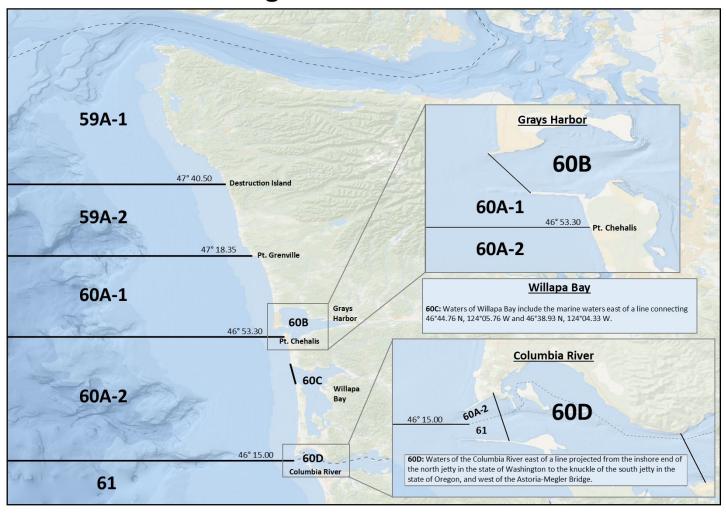


Figure 6. Washington coastal Dungeness crab fish ticket catch reporting areas.





Coastal crab co-management

Each year, WDFW works with the four federally recognized coastal treaty tribes — Hoh Tribe, Makah Tribe, Quileute Tribe, and Quinault Indian Nation (QIN) — to develop harvest management plans for the upcoming season. Harvest management plans establish a mutually agreed-upon framework to provide harvest sharing opportunity and achieve harvest sharing goals across tribal areas. Harvest management plans include provisions such as head-starts and special management areas (SMAs) that are closed to state crabbers within each tribe's U&A (Figure 7).

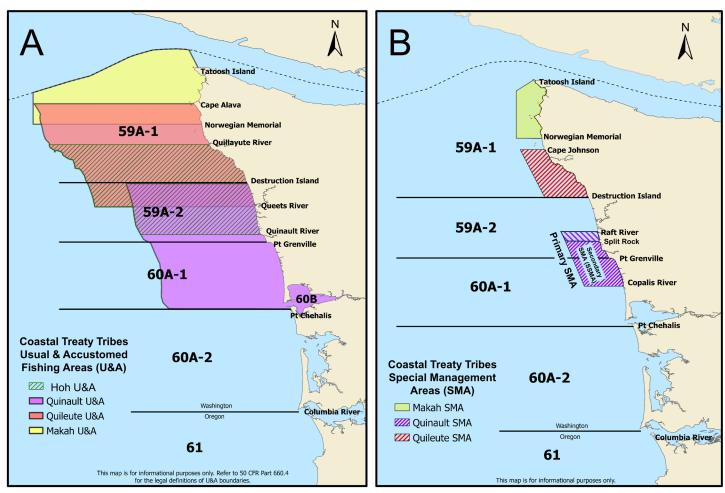


Figure 7. Location of tribal U&As and SMAs. (A) U&A fishing areas for each coastal treaty tribe. (B) SMAs closed to state crabbers following the opener of the 2023-24 Dungeness crab season.

Harvest management plans have been largely successful in equalizing harvest opportunity for tribal and state crabbers, with total harvest distribution over the past 10 seasons reaching a split of 50.5% for the state and 49.5% for the coastal treaty tribes within areas north of Point Chehalis (Figure 8). The final harvest sharing split for the 2023-24 season was 48.7% for the state and 51.3% for the coastal treaty tribes.

WDFW fishery managers met with representatives of each coastal tribe prior to the 2023-24 state fishery opener to finalize harvest management plans. Outlined below are a summary of provisions included within those agreements and in-season management actions undertaken by the tribal and state co-managers.

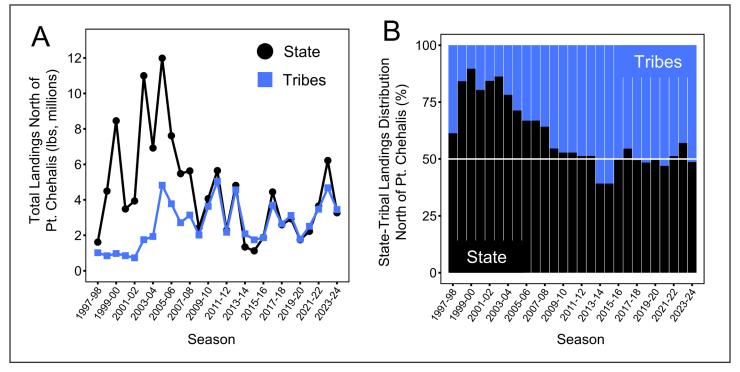


Figure 8. (A) Total tribal and state landings by season within tribal U&A fishing areas north of Point Chehalis, WA (1997-98 through 2023-24 seasons). (B) Percentage of state and treaty tribe landings within tribal U&As (1997-98 through 2023-24 seasons).

Hoh Tribe

The 2023-24 season marked the second time WDFW entered into a management agreement with the Hoh Tribe. The Hoh participated in the fishery and made landings in catch areas 59A-1 and 59A-2 (Figure 6).

Makah Tribe

The 2023-24 Makah-State agreement included an SMA from Tatoosh Island to Norwegian Memorial. The Makah SMA remained closed to state crabbers until March 5, after which fishing was allowed with a 200-pot limit for the first 30 days following the opening. Crab abundance has been sporadic in the Makah U&A fishing areas in recent years, affecting Makah participation.

Quileute Tribe

The 2023-24 Quileute-State harvest management plan included an SMA from Cape Johnson to Destruction Island shoreward of a line approximating 30 fathoms. Per the agreement,

the area north of Destruction Island can open to state crabbers on Jan. 15. Opening of this area can be delayed if the Quileute fleet does not have 20 fishable days between Dec. 1 and Jan. 15. The Quileute Tribe and state managers evaluated fishable days and found the target number of fishable days was met prior to Jan 15. However, to avoid imposing a fair start and to distribute fishing effort, WDFW managers made the decision to align the opening north of Destruction Island with the rest of the Washington Coast on Feb. 1, 2024. The Quileute SMA opened to state crabbers on May 1, 2024, with a 100-pot limit through May 31, 2024.

Quinault Indian Nation (QIN)

The 2023-24 Quinault-State agreement included a change to the sliding scale used to determine the number of non-competitive head-start days for QIN crabbers (Table 2). Adjustments to the sliding scale included the creation of a medium-high category for projected season abundance and an increase to the high abundance season catch threshold.

The new sliding scale reflects recent trends in crab abundance and aims to provide more opportunity to QIN crabbers in high abundance years; state catch has historically out-paced tribal catch in past seasons when crab abundance was high. The agreement also added an appendix describing the in-season management tools used by tribal and state co-managers to achieve harvest sharing goals, including provisions that set SMA revisions and pot limit adjustments.

Projected	Old Sliding S	cale	New Sliding Scale		
Season Abundance	QIN catch in first 31 days (pounds)	QIN season head start days	QIN catch in first 31 days (pounds)	QIN season head start days	
Low	< 1,250,000	45	1,000,000 - 1,250,000	45	
Medium	1,250,000 – 1,500,000	46	1,250,000 – 1,500,000	46	
Medium-High	-	-	1,500,000 – 1,750,000	47	
High	> 1,500,000	47	> 1,750,000	49	

Table 2. Updates to the sliding scale methodology used to determine the number of non-competitive fishing days (head-start days) for QIN crabbers based on catch within the first 31 days of the QIN fishery.

QIN catch within the first 31 days of their fishery indicated crab abundance was projected to be high for the 2023-24 season, albeit lower than the 2022-23 season. Per the sliding scale provisions in the agreement, this resulted in a 49-day head start for QIN crabbers within the area between Point Chehalis and Destruction Island. Further provisions outlined within the agreement included the designation of a primary SMA (PSMA) shoreward of a line approximating the 27-fathom depth curve between Raft River and Copalis River (Figure 7B).

Date	Change
Feb. 1, 2024	Primary SMA established.
March 25, 2024	Secondary SMA (SSMA) established shoreward of a line approximating the 27-fathom depth curve between Split Rock and the Copalis River. Coastwide reduced pot limit lifted in QIN U&A.
April 15, 2024	Southern boundary of SSMA moved from Copalis River to Joe Creek.
May 1, 2024	Western boundary of SSMA moved to a line approximating the 17-fathom depth curve.
Aug. 23, 2024	QIN fishery closed.
Aug. 26, 2024	QIN SMA opened to state crabbers.

Table 3. Management actions employed by QIN and WDFW to equalize harvest opportunity within the QIN U&A during the 2023-24 coastal Dungeness crab season.

QIN and WDFW fishery managers met throughout the 2023-24 season to monitor tribal and state catch rates and make adjustments as necessary. As the season progressed and the abundance of crab decreased, WDFW implemented management actions to provide additional opportunity to state crabbers within the QIN U&A, including the removal of pot limits within the QIN U&A on March 25 and a stepwise reduction in the size of the QIN SMA between March and August. Table 3 includes a list of management actions taken by the state within the QIN U&A.

2024-25 test fishery summary

WDFW conducts a pre-season test fishery starting in late October to determine the percentage of meat recovered from Dungeness crab. WDFW follows Tri-State Pre-Season Testing Protocols and hires contracted coastal commercial crab vessels to complete tests. Westport and Long Beach stations are repeatedly sampled until a meat pick-out percentage of 23% is obtained (Figure 9). Test fishing results are available at psmfc.org/crab.

WDFW conducted four rounds of test fishing within the Westport area, with meat pick-out exceeding the 23% threshold outlined in the Tri-State Pre-Season Testing Protocols on Dec. 16, 2024. The Department also conducted four rounds of test fishing within the Long Beach area, exceeding the meat pick-out threshold on Jan. 6, 2025.

WDFW is grateful to the fishers and processors that work cooperatively with the Department to successfully complete this important work.



Figure 9. Locations of WDFW coastal Dungeness crab test fishery stations.

Reminders for the 2024-25 season

Line marking requirements

WDFW is currently in the process of developing updates to line marking requirements. **Proposed line-marking changes have NOT been implemented for the 2024-25 season.** WDFW does NOT recommend participants purchase manufactured state-fishery specific line until new rules are finalized and adopted by the Washington Fish and Wildlife Commission.

Current line marking requirements in WAC 220-340-430 remain in effect for the 2024-25 season. WDFW will NOT be adopting any new line marking rules that pertain to the 2024-25 season. All coastal Dungeness crab gear is required to have 12 continuous inches of red at two locations — within one fathom from the pot and within one fathom from the main buoy on the line connected to the pot — as shown in Figure 10. The 12-inch span of red must be continuous.

Lines may be marked by a variety of methods; examples include, but are not limited to, the application of red paint, or by interweaving red line into line of another color. Marking line with zip ties or other implements at regular intervals does not fulfill this requirement. The use of line marks or color combinations in Washington fixed gear fisheries that are required for other state or federal fisheries is prohibited.

Buoy registration

Buoy registration is a critical requirement for all fishery participants to enhance accountability and promote responsible fishing practices. The registration process involves providing information about your buoy brand and color, which is essential for identifying the owner of crab gear and attributing it to the correct fishery in the event of marine



mammal or other marine life entanglements.

Registration of buoy colors must be done annually using this online form: qrcodes.

pro/jDEArX

Marine Mammal Authorization Certificate

The Marine Mammal Protection Act (MMPA) prohibits killing or injuring marine mammals. However, the Marine Mammal Authorization Program provides an annual exemption for accidentally killing or injuring **non-endangered** marine mammals during commercial fisheries. All Washington

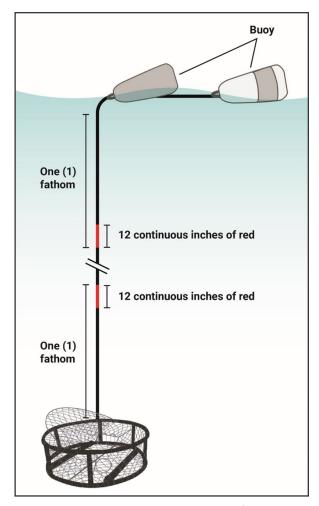


Figure 10. Coastal commercial Dungeness crab fishery gear line marking requirement.

coastal Dungeness crab fishery license holders are automatically registered for a Marine Mammal Authorization Certificate. You are required to download and print your annual authorization from NOAA Fisheries (qrcodes.pro/y475tY). Authorization certificates are issued on the calendar year; the 2024 certificate and the 2025 certificate are available on the website now. As part of this authorization, you must file a report with NOAA Fisheries within 48 hours of an incidental interaction with a marine mammal.



2025 Certificate

For more information, contact Dan Lawson at dan.lawson@noaa.gov or 206-526-4740.

14-day landing requirement

From May 1 through Sept. 15, it is unlawful to leave Dungeness crab pots deployed in Grays Harbor, Willapa Bay, Columbia River, or waters of the Pacific Ocean adjacent to the Washington state for more than 14 consecutive days without making a Dungeness crab landing (WAC 220-340-480).

During the 2023-24 season, approximately 50 vessels were found to be in violation of the 14-day landing requirement during the summer management period. After review of the vessels' electronic monitoring (EM) data, it was confirmed that several of these vessels had tended to their gear during the 14 days but had not

made a landing. EM staff contacted those vessels and reminded them of the landing requirement. Multiple other vessels were forwarded to enforcement for further investigation of the landing violation. Compliance of this landing requirement is mandatory and is being enforced. Crabbers should be mindful of this requirement if intending to participate in the fishery after May 1.

Electronic monitoring (EM)

WDFW worked with Archipelago to distribute 220 Lite Integrated Monitoring Equipment (LIME) units to vessels designated on Washington coastal crab licenses before the 2023-24 season.

EM system disruptions were rare, and only 10 exemption permits were issued during the 2023-24 season for system repairs. EM system failures included loss of power to the unit, exposure to water/flooding, and poor mounting location with an obstructed view of the sky.

Crabbers must subscribe to a data plan before the start of the 2024-25 season. If using a LIME system, please visit: archipelago.ca/fishvuelime-help.

Once a data plan has been purchased, all fishery participants must:

- 1. Submit an activation report to WDFW: wdfw.wa.gov/fishing/commercial/crab/coastal/electronic-monitoring#activation.

 Activation reports may be mailed or emailed to EM staff. Activation reports must be submitted before the vessel begins participating in the coastal Dungeness crab fishery (this includes the 73-hour gear set period).
- WDFW staff will provide confirmation that the LIME unit is transmitting data to the contact information provided on the form. Crabbers do not need to wait for this confirmation to begin fishing.

WDFW staff are available to help coastal Dungeness crab fishery participants meet EM requirements. For questions or replacement forms please contact:

WDFW Electronic Monitoring Program

48 Devonshire Road, Montesano, WA 98563

Phone: 360-249-4628

Email: coastal.crab.EM@dfw.wa.gov

Robert Morgan

Electronic Monitoring Program Manager

Phone: 360-480-8596

webpage: grcodes.pro/W2GrDh.

Email: Robert.Morgan@dfw.wa.gov

Crabber/towboat lane agreement

For over 50 years, crabbers and towboat operators have agreed on tow lanes where crab gear would not be set to prevent conflicts between towboats and commercial crab gear that can have a substantial economic impact on both groups. During the 2023-24 season, 130 crab fishery vessels fished gear inside of the tow lanes and 67 vessels fished gear inside the heavily trafficked Grays Harbor and Columbia River access lanes. WDFW encourages vessels to keep these lanes clear to prevent gear loss. Tow lane charts can be found on the Washington Sea Grant

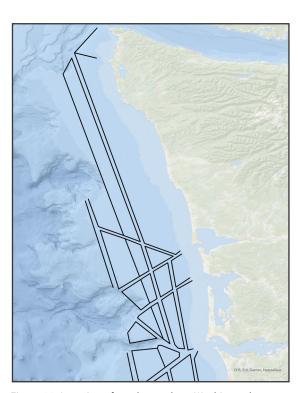


Figure 11. Location of tow lanes along Washington's coast.

Summer fishery sampling

The Summer Fishery Management Plan provides protection for softshelled crab during the peak male recruitment molt period when they are more susceptible to handling mortality. From the first Sunday in July through Sept. 15, a 2,500-pound weekly landing limit is in place. During this period, WDFW conducts crab condition tests via dockside samples, as well as ride-along trips with consenting commercial crabbers. A 50% soft-shell limit is used to determine whether to further reduce landing limits. Shell condition tests collected this summer during ride-along trips remained below the 50% threshold for soft-shelled crab (Figure 12) and the weekly limit remained at 2,500 pounds through the end of the season.

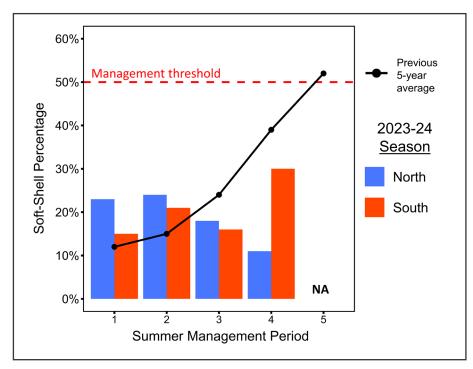


Figure 12. Percentage of soft-shelled crab sampled during 2024 summer fishery ride-along trips compared to the previous five-year average. Two-week management periods begin the first Sunday in July. Two ride-along trips are conducted each management period: one out of a south port and one out of a north port.







Derelict gear recovery

Gear recovery for the 2023-24 season occurred from May 8-Oct. 31. WDFW delayed the start of in-season gear recovery to allow crabbers additional time to remove their regular season buoy tags after May 1 and leave only the summer buoy tag.

WDFW issued 34 permits to crabbers interested in recovering gear in coastal waters, including the Columbia River, Willapa Bay, and Grays Harbor. Of the 34 permits issued this year, 15 recovered gear. In-season gear recovery continues to be successful in removing derelict gear earlier in the year to help reduce the risk of whale entanglements. A total of 257 pots were recovered in 2024, with 235 recovered in-season and 22 recovered post season – 90.7% percent of pots were recovered in the in-season gear recovery period (Figure 13).

On average, 601 pots were recovered per season between 2008 and 2023. Pots recovered in the 2023-24 season decreased 70% compared with previous years. Gear recovery participants

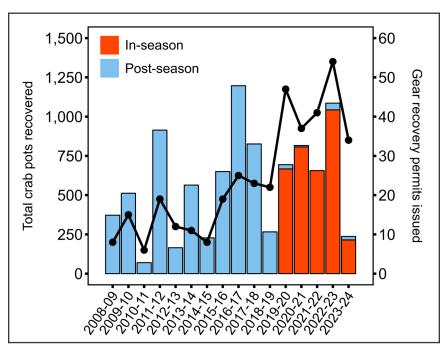


Figure 13. Derelict gear recovery, number of pots per season (bars) and number of recovery permits issued (line), 2008-09 through 2023-24.

reported encountering fewer pots than in past seasons. Factors that may have contributed to a lower gear loss rate for the 2023-24 season include a decrease in storm frequency and severity, diligent tending of borrowed gear by crabbers affected by the Ilwaco fire, and a coastwide pot limit that reduced gear deployment by 20% at the season opener.

Derelict Gear Recovery Program Permit:

- Permits are available beginning in April.
- To apply for a permit, email Jamie.Fuller@dfw.wa.gov or call 360-580-0875.

Whale entanglements and conservation efforts

Under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA), whales and sea turtles are granted federal protections that define the impact that fisheries can have and outline processes to reduce

impacts. Entanglements in fishing gear have been documented as one of the largest contributors to human-caused mortality and serious injury of large whales on the West Coast. Since 2014 there have been an elevated number of entanglements (Figure 14). Commercial Dungeness crab gear makes up the largest portion of identifiable gear in large whale entanglements; however, over 50% are in

unidentified gear.

Gear from the Washington coastal Dungeness crab fishery has been confirmed in entanglements of humpback and gray whales. From 2015-23, there were 10 confirmed humpback whale entanglements and six confirmed gray whale entanglements (Figure 15). Three populations of humpback whales are observed in Washington

waters: the non-ESA listed

ESA-listed Mainland Mexico

Hawaii population, the

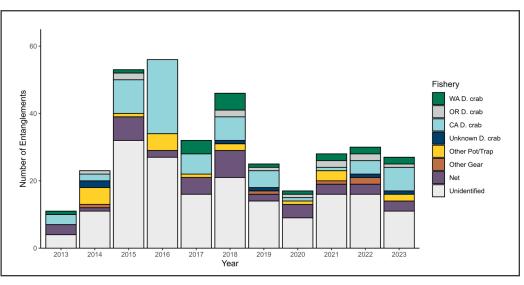


Figure 14. Number of confirmed large whale entanglements each year by the identified source of entanglement on the West Coast from 2003-22 (D. crab = Dungeness crab).

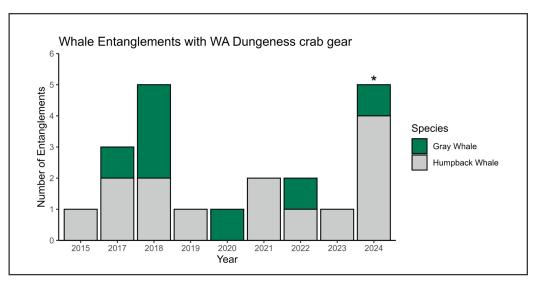


Figure 15. Number of confirmed large whale entanglements with Washington coastal Dungeness crab gear each year by whale species from 2015-24. Data from 2024 is preliminary and incomplete.

population, and the ESA-listed Central American population. The gray whales observed in Washington waters are not ESA-listed.

Preliminary 2024 whale entanglements in Washington coastal Dungeness crab fishing gear

From Jan. 1-Oct. 31, 2024, there were five confirmed entanglements with Washington coastal Dungeness crab gear, including one gray whale and four humpback whales (Figure 15, Table 4). Disentanglement responses for these five entangled whales varied: two were successfully disentangled, there were unauthorized partial

disentanglements for two others, and there was an unsuccessful disentanglement response for the fifth whale that was later observed deceased (Table 4). Each entanglement involved multiple sets of crab gear, often from multiple fishing vessels. Two entangled whales involved gear with 2023-24 main season tags, and the other three entangled whales had gear with 2023-24 summer season tags.

Report	Whale	Report	WDFW	Washington Coastal Dungeness	Additional Fishing	Disentanglement	
Date	Species	Location	Tags	Crab Gear	Gear	Response	Status
				Six sets of			
				gear from			Deceased,
		Grays	2023-24	five	One set of		observed off
		Harbor,	main	different	Dungeness	Unsuccessful	the Oregon
April 16	Gray	WA	season	owners	crab gear	disentanglement	coast
				Two sets of			
			2023-24	gear from		Unauthorized,	
		Long	summer	the same		partial	
July 19	Humpback	Beach, WA	season	owner	None	disentanglement	Unknown
		20 miles		Three sets			
		offshore of	2023-24	of gear from			
		Westport,	summer	different		Successfully	
Aug. 14	Humpback	WA	season	owners	None	disentangled	Disentangled
					Two sets		
			2023-24		of	Unauthorized,	
		Coos Bay,	main	One set of	Dungeness	partial	
Aug. 16	Humpback	OR	season	gear	crab gear	disentanglement	Unknown
			2023-24				
		Hecate	summer	One set of	More than	Successfully	
September	Humpback	Strait, BC	season	gear	20 buoys	disentangled	Disentangled

Table 4. Preliminary 2024 whale entanglements with Washington coastal Dungeness crab gear identified.

How can you help?

- 1. Follow WDFW's "Directive to minimize whale entanglement risk in commercial Dungeness crab fishing," including following the best management practices.
- 2. Report entangled whales or sea turtles immediately to the National Marine Fisheries Service (NMFS) entanglement response hotline at 1-877-SOS-WHALE (1-877-767-9425) or hail the U.S. Coast Guard on Channel 16. If possible, wait near the entangled animal.
- 3. Take Level 1 First Responder training to learn how to properly assess, document, and report entangled whales. This course is an educational option to help contribute to documentation and response efforts and better understand the various roles involved in disentanglement. (west-coast-training. whaledisentanglement.org/#/)

Report Entangled Whales IMMEDIATELY

1-877-SOS-WHALE (1-877-767-9425) or hail the U.S. Coast Guard on Channel 16

WDFW actions

Reducing entanglement risk

WDFW limits the amount of gear and line in the water in spring and summer, when whales are known to feed off the Washington Coast. Since the 2020-21 season, the Department has imposed a summer season one-third pot limit reduction (WAC 220-340-480) and allowed in-season derelict gear recovery. Crab pots must use only the amount of line necessary for the tides, currents, and weather (WAC 220-340-430); this requirement ensures that lines remain taut and vertical, reducing the risk of entanglement. New rules adopted in 2023 expanded the taut line guideline to other shellfish and pot fisheries in the state.

Best management practices

- ▶ Remove any fishing gear you are not actively tending during the season and have all gear out of the water by the end of the season (WAC 220-340-480).
- Minimize scope. Use only the amount necessary to compensate for tides, currents, and weather (WAC 220-340-430).
- Minimize excess line to avoid floating line at the surface. Floating line should be as limited as practical between the main buoy and trailer buoy(s).
- When changing set location across depths, adjust the length of pot lines by adjusting shots (i.e., measured length of line) to maintain the minimum amount of scope necessary to compensate for currents and tides.

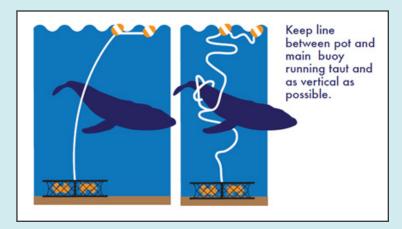


Figure 16. How line requirements can reduce entanglement risk.

- Avoid setting gear in the vicinity of whales when possible. Communicate the locations of high whale activity with other crabbers.
- Minimize knots and splices which can get caught up in the baleen.
- Mark your gear according to regulations (WAC 220-340-430).

What's next?

In 2025 WDFW will bring new line-marking regulations to the Fish and Wildlife Commission, continue to move forward with the conservation plan, and participate in the West Coast Take Reduction Team (TRT).

West Coast coordinated line marking

Results from NMFS line-marking analysis highlight the need for gear to include multiple large marks to improve visibility and identification for state and federal fisheries. Fishery managers have been developing a gear marking schema for the West Coast Dungeness crab fisheries and coordinating with federal and state partners for line marking requirements in other West Coast fisheries. Improved gear marking helps to accurately

attribute entanglements to a fishery – and, in some cases, rule out Washington coastal Dungeness crab gear – and helps with management tool development. WDFW held two small industry workshops in June, multiple advisory board meetings, and a public industry meeting in September to gather feedback. **WDFW has been developing a comprehensive marking schema with input from the crab industry and will be bringing new regulations to the Fish and Wildlife Commission in 2025.**

For questions on line marking, please contact Megan Hintz at 564-215-1757 or Megan.Hintz@dfw.wa.gov.

Conservation plan and incidental take permit

WDFW is developing the Washington Coastal Dungeness Crab Conservation Plan (CP) to bring the fishery into compliance with federal ESA regulations as the foundation of an incidental take permit application. The CP represents a long-term strategy for managing the fishery to reduce the risk of marine life entanglements in alignment with WDFW's mission. The Department began drafting the conservation plan in 2019 and plans to submit it to the National Oceanic and Atmospheric Administration (NOAA) for review in 2025.

West Coast Take Reduction Team

NOAA Fisheries is establishing a West Coast TRT under their authority of the MMPA to reduce incidental mortality and serious injury of strategic stocks of marine mammals. The preliminary scope of the TRT will address three stocks of whales, including Mainland Mexico humpback whales, Central America/Southern Mexico humpback whales, and Eastern North Pacific blue whales, and five commercial fisheries, including federal sablefish pot, California Dungeness crab pot, California spot prawn pot, Oregon Dungeness crab pot, and Washington coastal Dungeness crab pot. The TRT will include representatives from the fishing industry, fisheries managers, federal resource managers, scientists, and conservationists. Once the TRT is established, they have six months to develop and agree on a Take Reduction Plan that reduces fisheries' impacts on the strategic stocks below allowed thresholds.

NOAA Fisheries plans on hosting the first TRT meeting in June 2025 and is currently interviewing and selecting TRT members. NOAA Fisheries provided selection criteria for TRT industry members that WDFW shared with the Coastal Dungeness Crab Advisory Board to compile a list of recommended individuals for consideration. Interested industry members were passed on to NOAA Fisheries for interview and consideration in serving on the TRT. Updates on the West Coast TRT process can be found online at: West Coast Take Reduction Team | NOAA Fisheries.



Recreational crabbing

WDFW's recently formed Coastal Recreational Crab Monitoring Program is based out of the Coastal Region office in Montesano and the Willapa Bay Field Station in Ocean Park. Team members are working to refine established fishery monitoring procedures for coastal crab spanning from Neah Bay to the Columbia River, including Grays Harbor and Willapa Bay, while continuing to collect data and educate the crabbing public.

Priorities for the 2023-24 season were to:

- Identify coastal access sites experiencing the greatest crabbing effort.
- 2. Define the impact of holidays and weekends on crabbing effort.
- 3. Investigate how crabbing effort is affected by seasonality and participation within other fisheries.
- 4. Enhance understanding of how land-based and boat-based crabbing effort differs.

This year creel staff surveyed 25 sites, resulting in 13,676 interviews, 24,819 crabbers interviewed, and 13,115 Dungeness crab sampled for biological data. Team members have also distributed thousands of crab informational kits, gauges, and shellfish stickers while interacting with crabbers in the field or at community outreach events. Of these sites, the largest share of observed crab caught was in the Columbia River, followed by Willapa Bay and Grays Harbor. Crabbing from marina piers and vessels represented the largest share of crabbing effort.

The Coastal Recreational Crab Monitoring Program is working to generate estimates of total crabbing effort and catch at each sampling site. Keep an eye out for future updates on our progress!







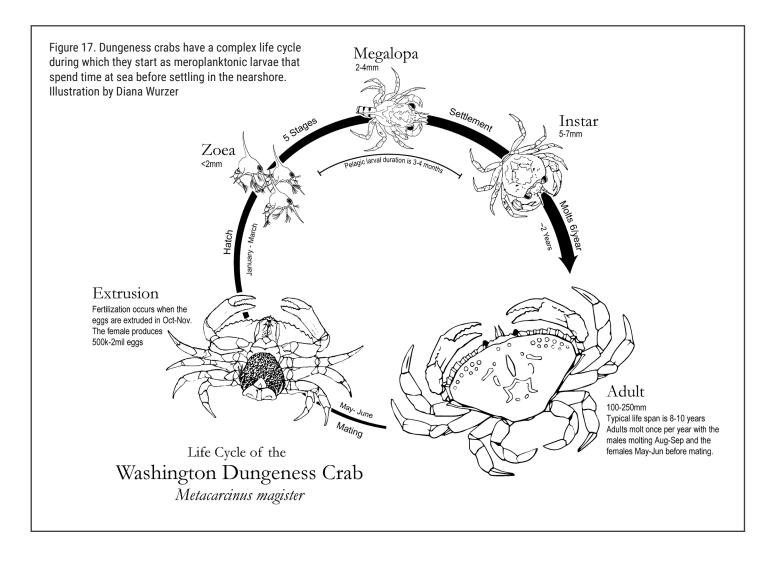


Megalopae light trap project

This summer marked the second year of WDFW's efforts to catch Dungeness crab megalopae using light traps in partnership with the Pacific Northwest Crab Research Group (PCRG). A study by University of Oregon Professor Emeritus Alan Shanks showed the number of larval crabs that return to the shelf each year could help predict the commercial landings of adult crabs four years later. WDFW and PCRG are determining whether that model could also apply to Washington waters. The megalopae stage is the largest and final planktonic stage before larvae molt into crabs and settle on the sea floor (Figure 17). In spring through summer, Dungeness crab megalopae return to near shore areas, where they enter the benthic instar, or juvenile, stage. They

grow to harvestable size in about four or five years, which is how long WDFW will need to trap them to potentially start seeing correlations between larval quantities and adult crab populations.

WDFW staff set light traps in Westport and Tokeland in mid-March 2024 and counted megalopae daily before pulling the traps in early August. Light traps consist of a water cooler jug topped with a 5-gallon bucket. Inside the bucket is a timer by which a light in the jug turns on at night and off in the morning. Megalopae and other marine organisms are attracted to the light. They enter the trap by swimming through funnels cut into the sides of the jug and remain captive until the trap is sampled. The



Westport trap caught 20,246 Dungeness megalopae in 2023, compared to only 1,054 in 2024. WDFW added the Tokeland trap in 2024, capturing 17,792 Dungeness megalopae at that site (Figure 18). Table 5 shows total catch from each trap by year. Once sampling is finished, organisms are returned to the water.

Location	Year	Megalopae	Instar	Total
Westport	2023	20,246	2,103	22,349
	2024	1,054	45	1,099
Tokeland	2024	17,793	846	18,638

Table 5. Annual totals of Dungeness crab megalopae and instars captured by the Westport and Tokeland light traps by sampling year

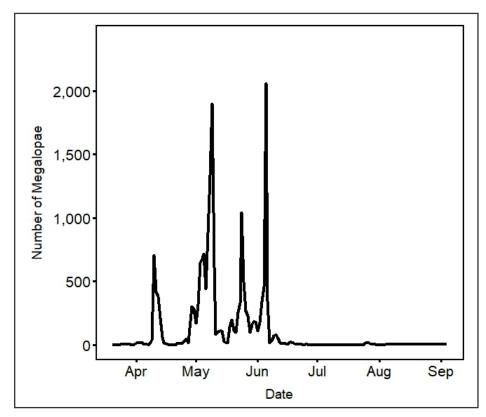


Figure 18. Megalopae abundance spikes in Tokeland during the 2024 light trap season.







Enforcement update

The mission of the WDFW Enforcement Program is to protect Washington's natural resources and the public they serve. During the 2023-24 coastal Dungeness crab fishery, WDFW enforcement officers demonstrated commitment to this mission through the enforcement of rules and management regulations designed to afford all fishers an equitable opportunity to harvest their share of healthy crab. This report organizes enforcement actions into sections based on fishery type (commercial or recreational) and specific issues, such as fish ticket reporting, gear tampering, and licensing violations. Each subsection provides examples of enforcement efforts to ensure compliance and conservation.

Commercial fishery

Ilwaco fire response

WDFW officers started the 2023-24 season by assisting commercial crabbers affected by a fire at Ilwaco Landing. Officers supported agency staff in their response, ensuring crabbers that lost gear in the fire had the required resources and proper documentation prior to the season opener.

Fair start and pot limit enforcement

The 2023-24 season opened with a reduced pot limit coastwide, requiring fishers to adjust their operations accordingly. WDFW officers conducted hold inspections to check for compliance with the pot reduction, ensuring that fishery participants adhered to the new regulations. Additionally, officers conducted aerial and ocean patrols of the Columbia River, contacting Oregon-based boats to verify that extra tags were retained on board for all vessels fishing in Washington waters.

Cooperation with tribal enforcement

WDFW conducted pre-season patrols south of Point Chehalis. Ideally these efforts are conducted collaboratively between WDFW Enforcement and Quinault Tribal Police. Joint operations can improve processes that require coordination and mutual understanding of jurisdictional boundaries and regulations.

Fish ticket reporting

Enforcement efforts early in the season focused on ensuring accurate and compliant reporting of all crab harvests, including waste and take-home crab, on fish tickets. Sqt. Alexander contacted vessels and buyers to reinforce these requirements, emphasizing the importance of complete and accurate documentation. During an offload, Officer McOmber observed numerous crabs being tossed overboard, prompting him to educate the skipper and cannery employees on proper procedures for offloading and reporting dead loss. A stern warning was issued to ensure future compliance. Additionally, Sgt. Alexander addressed improperly completed fish tickets with a buyer who was the license owner but not the vessel operator. After being educated on the correct ticket completion process, the buyer corrected the errors to align with reporting standards.

Gear tampering and monitoring

WDFW enforcement officers addressed multiple complaints from crabbers alleging that their gear had been run or their lines had been cut by other fishery participants, raising concerns about tampering and unfair practices. To investigate these allegations, officers utilized archived EM data, which provided a detailed record of activity. After thorough review, none of the complaints were found to be substantiated, demonstrating the effectiveness of EM in resolving disputes and ensuring accountability in the fishery.

14-day landing violations

The 14-day landing rule, which goes into effect May 1, is designed to prevent crab gear from being left in the ocean for extended periods, reducing the risk of ghost fishing that can kill entrapped crab. During the summer management period, Officers McOmber and Dean contacted numerous vessels that failed to make a landing within the required 14-day window. Vessel operators were educated on the importance of this regulation for sustainable fishery practices, and enforcement actions included multiple warnings and criminal citations to ensure compliance.

Recreational fishery

Illegal crab sales

Officer Dean responded to a report of an individual selling recreationally caught Dungeness crab on Facebook without a license. The individual was informed about the necessary licenses and instructed to remove the post.

Possession and limit violations

Enforcement officers encountered several cases of recreational crabbers violating possession and catch limit regulations, highlighting the need for proper measurement, licensing, and adherence to legal limits. Officer Dean observed a group crabbing in the Westport Marina without measuring their catch, resulting in violations for possession of undersized Dungeness and red rock crabs, possession of female Dungeness crabs, and retaining twice the legal limit. Fifty crabs were seized and released back into the marina, and two individuals were cited. In another case. Officer McOmber encountered individuals checking crab pots late at night in the same marina without valid licenses. They were found in possession of undersized male Dungeness crabs, female Dungeness crabs, undersized red rock crabs, and soft-shelled crabs. All individuals were cited, and the crabs were released. Additionally, Officer Dean contacted a family crabbing in the Westport Marina who had retained undersized Dungeness crabs; one





adult was cited, and the family was educated on proper crab measurement techniques.

Over-limit violations

Recreational crabbers in Washington are allowed to retain a maximum of 12 male Dungeness crabs per person per day from the Columbia River (maximum of six elsewhere along the coast), provided they meet size and condition requirements. Officer Garrison observed two crabbers at the Cape Disappointment jetty exceeding the legal limit. Despite their reluctance to cooperate, he found they had four crabs over the legal limit. Both crabbers were cited and advised on the importance of honesty with law enforcement.

Clayton Parson to retire after 34 years



After 34 years with the WDFW coastal shellfish program, Clayton Parson is retiring April 30, 2025. Clayton, a Scientific Technician 4, has conducted crab shell condition testing and collected crab biological data for many years. His contributions to Dungeness crab fishery management will be greatly missed.

"I think back fondly to my early days aboard the fishing vessel Ethel May with Capt. Louis Summers, conducting the fall coastal crab test, and witnessing firsthand the hard work and determination of the crabbers who make their livelihood in this challenging industry," Clayton said. "It's been an honor to be part of this journey, and I'm thankful for the friendships, memories, and impact that will stay with me long after my career here ends."

We wish Clayton a very happy retirement and thank him for all his years of service!

WDFW hires Climate Research Scientist

Chris Biggs, Ph.D., joined WDFW in September as our new Climate and Ecosystem Fisheries Research Scientist. Chris recently returned to Washington from Texas, where he conducted research at the University of Texas Marine Science Institute on fish spawning aggregations and the ecological impacts of climate change. In his new role, Chris will focus on understanding oceanic and climate factors influencing crab abundance and distribution along the coast. He will also contribute to the development of the coastal Dungeness crab Fishery Conservation Plan aimed at reducing whale entanglements.





Stay up-to-date

Many changes occur each season in the Washington coastal crab fishery. These may include updates to SMA boundaries or dates, marine toxin issues, pot limit changes, and marine mammal concerns. WDFW communicates these changes using various methods, including distributing emergency regulations by mail using the address on your license application. We also have a coastal crab email distribution list and a no-reply text system.

Sign up for our email and text lists by sending your name, email address, and cell phone number to Jamie.Fuller@dfw.wa.gov or 360-580-0875. You may also include members of your crew



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Coastal commercial **Dungeness crab fishery** wdfw.wa.gov/fishing/ commercial/crab/coastal





WDFW's new Crab Washington sticker and logo is available by request for use at festivals, events, and other outreach opportunities. Please contact TeamMontesano@dfw.wa.gov.

WDFW Values

- Accountability: We hold ourselves and each other responsible for acting consistent with our values and mission.
- Service: We add value to Washington communities and seek to improve the public's experience.
- Professionalism: We serve in a manner that reflects positively on the Department and on ourselves.
- Integrity: We are consistently open, honest, ethical, and genuine in our actions.
- Respect: We treat each other with dignity.
- **Empathy:** We take time to understand and appreciate others.

