

2017 Puget Sound Dungeness Crab Fishery



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Washington Fish and Wildlife Commission Meeting

Presentation Outline

- Key elements of the Puget Sound crab fishery policy (C-3609)
- Performance and harvest of the 2017 Puget Sound commercial and recreational crab fisheries
- Recreational crab fishery education and outreach program
- Crab creel pilot study
- Derelict shellfish gear removals
- Crab fishery regulation compliance reported by Enforcement Program staff

Puget Sound Crab Fishery Policy C-3609

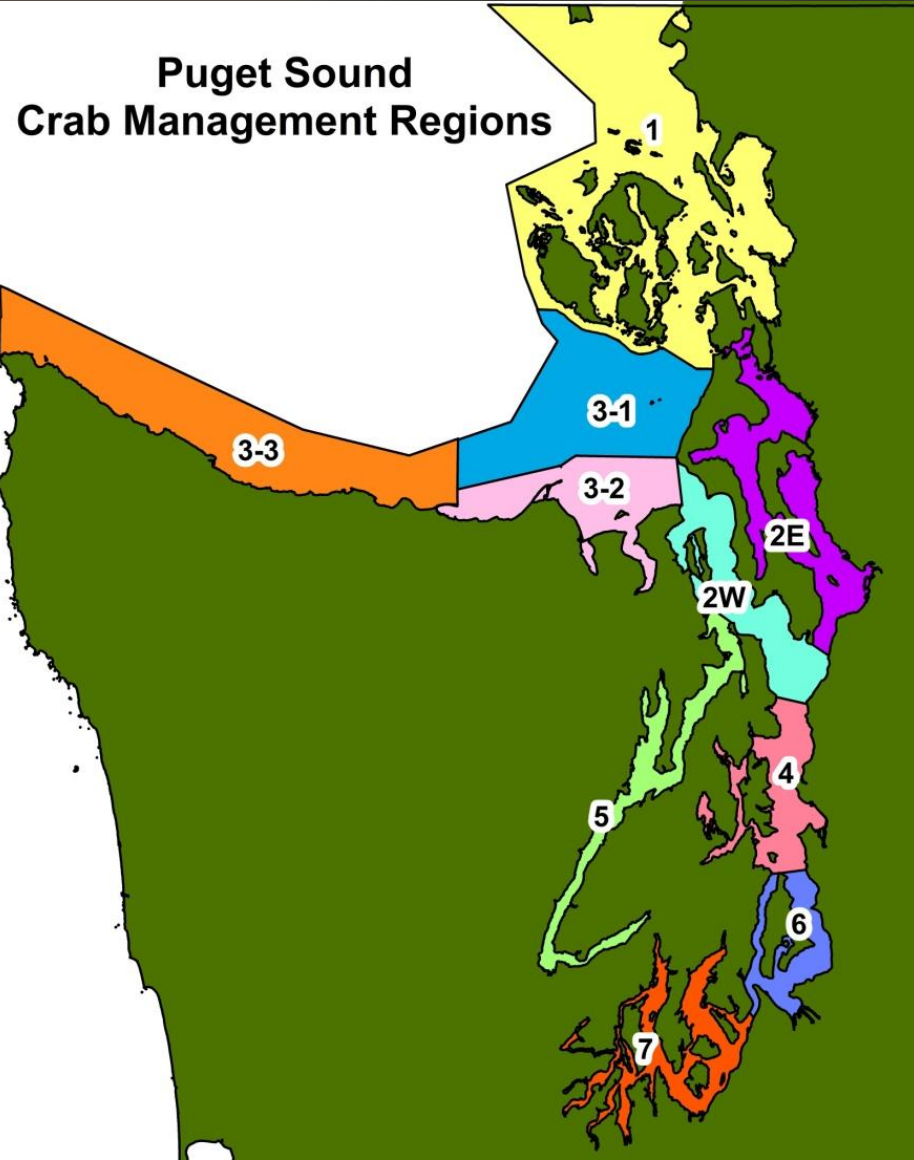
- A revised policy was adopted by the Commission on October 1, 2010
- Protects and conserves the Puget Sound Dungeness crab resource
- Provides for recreational and commercial fishery opportunities
- Maintains a base recreational season from year to year
 - Summer Season: July – Labor Day; 5 days per week, Thursday through Monday
 - Winter Season: October – December 31; 7 days/week
 - Bag limit of 5 crab per day

Puget Sound Crab Fishery Policy Guidelines

- Manage using the “3-S” system
- Enhanced Enforcement strategies
- Pursue education and outreach to improve rule compliance
- Implement strategies to reduce derelict crab pots
- Recognize differences in regional abundance and implement policy priorities to share available resource

Puget Sound Crab Fishery Management

**Puget Sound
Crab Management Regions**

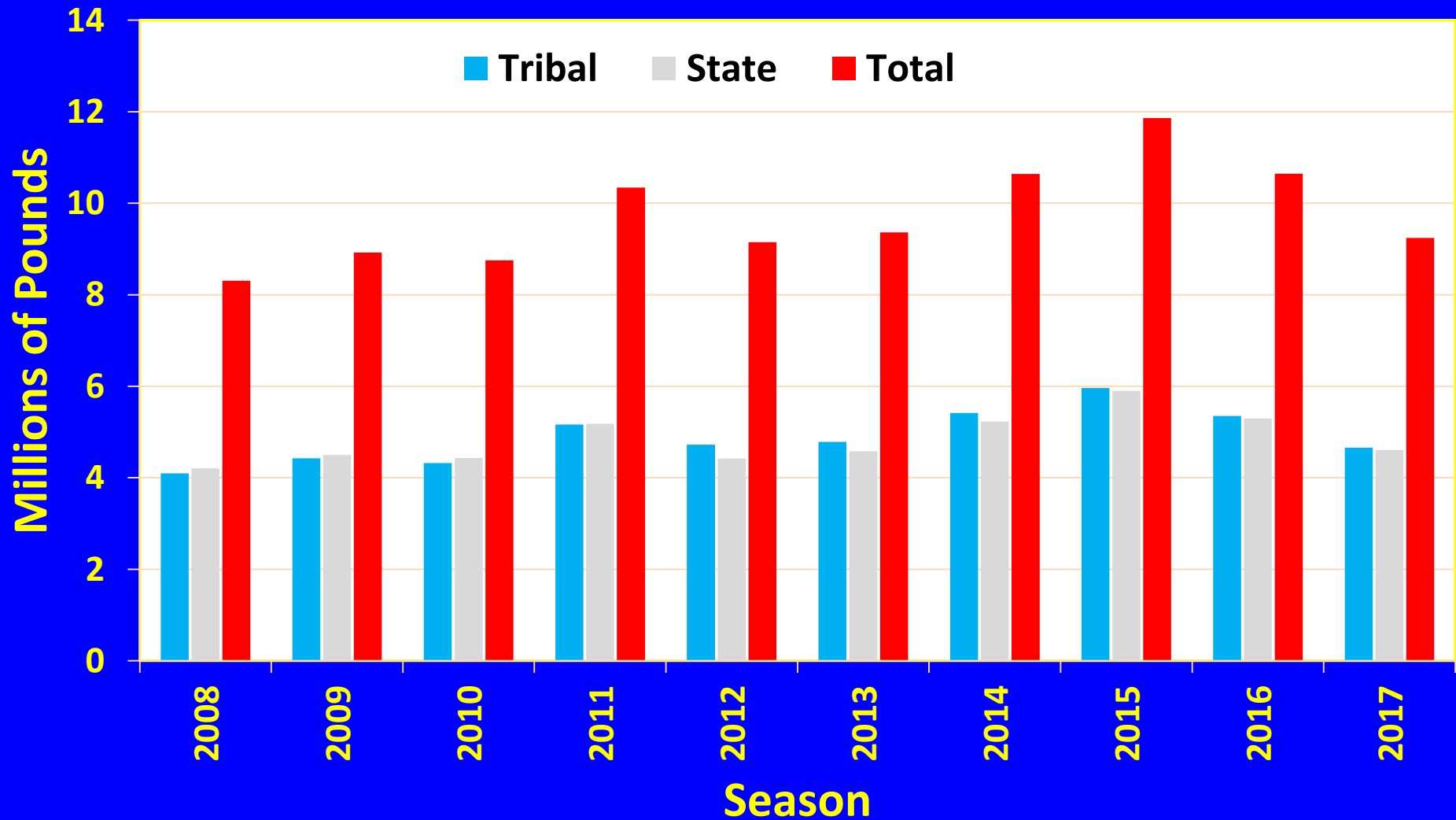


- Seven management regions.
- Policy C-3609 provides recreational and commercial opportunity in Regions 1, 2, and 3. Regions 4, 5, and 6 are reserved for recreational opportunity only.
- Region specific annual harvest quotas are set pre-season to increase stability and predictability in fisheries.
- Regional State/Tribal harvest shares are established annually through co-management agreements.
- June through May Management Plans. Soft-shell closures during spring and early summer months.

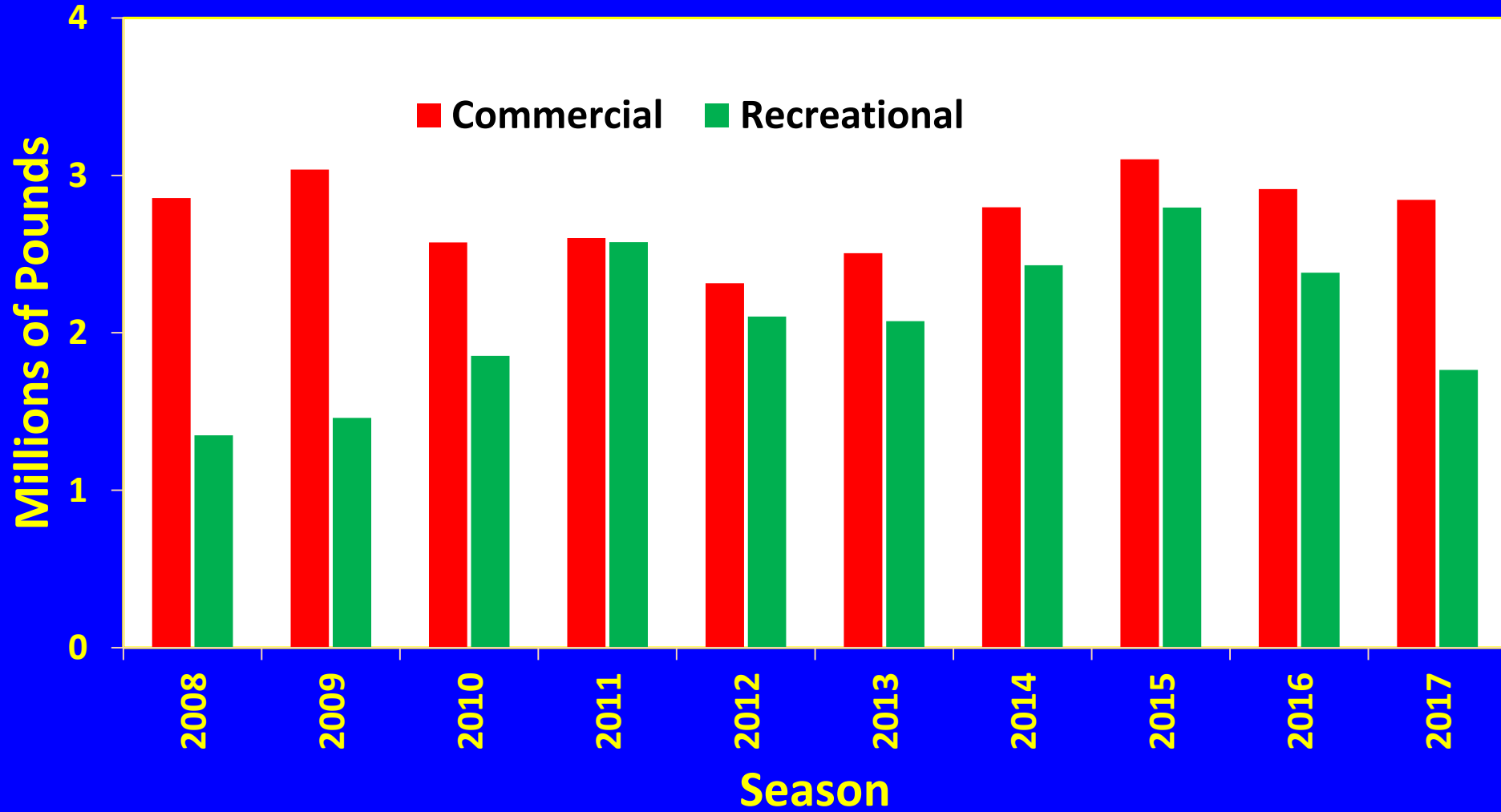
2017 Commercial, Recreational and Treaty Fisheries



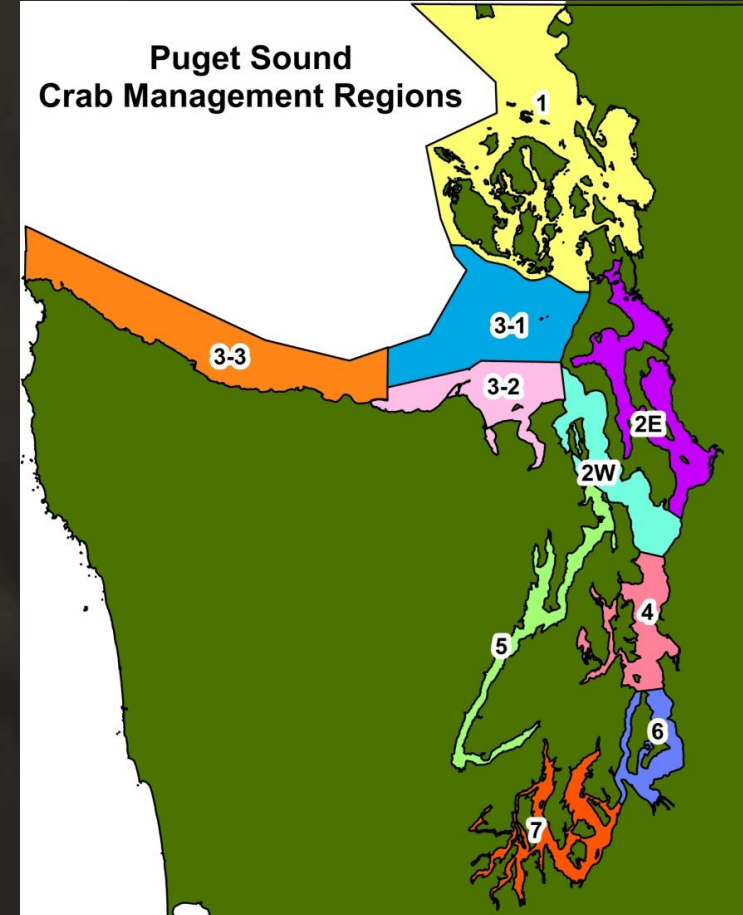
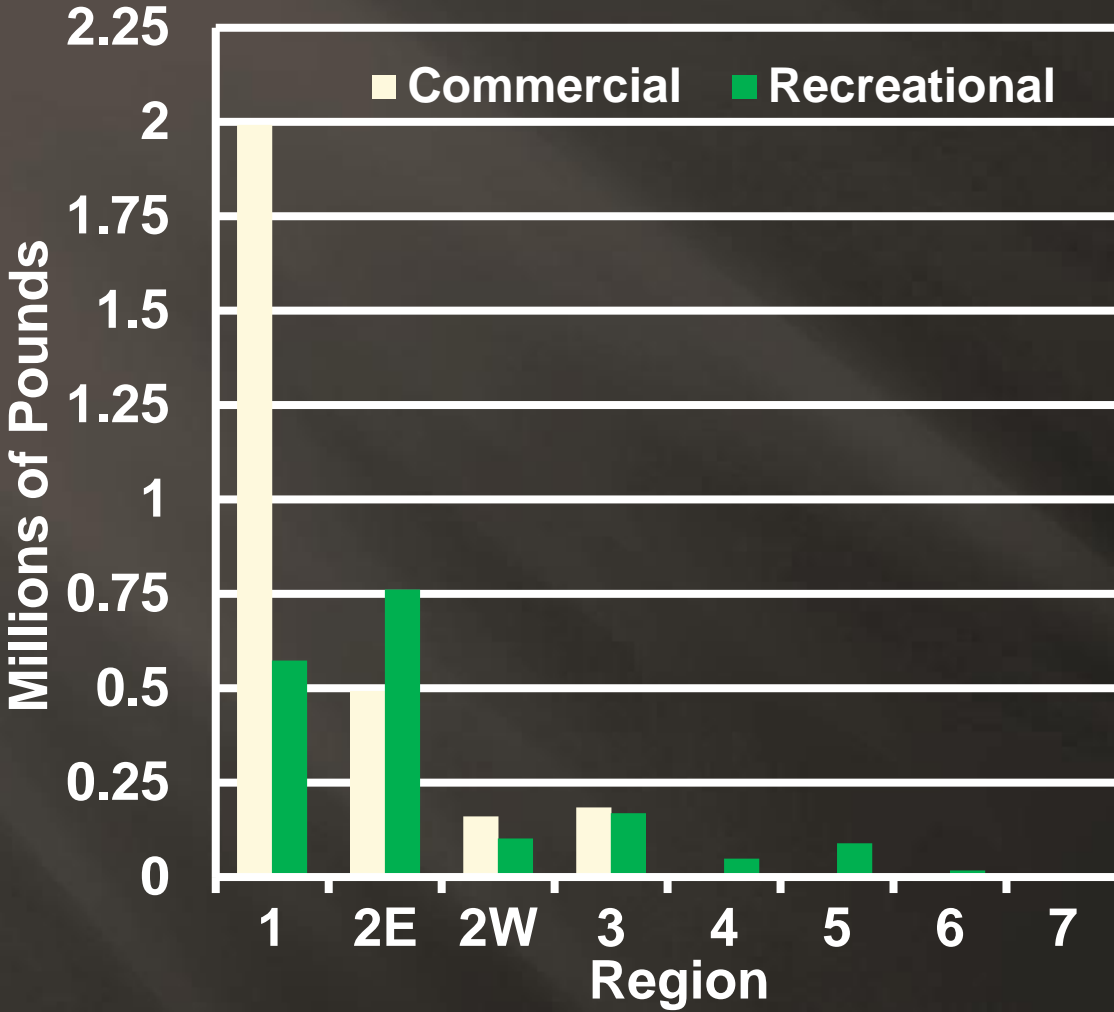
State and Tribal Dungeness Crab Harvest in Puget Sound (2008-2017)



Dungeness Crab Harvest for State Fisheries in Puget Sound (2008-2017)

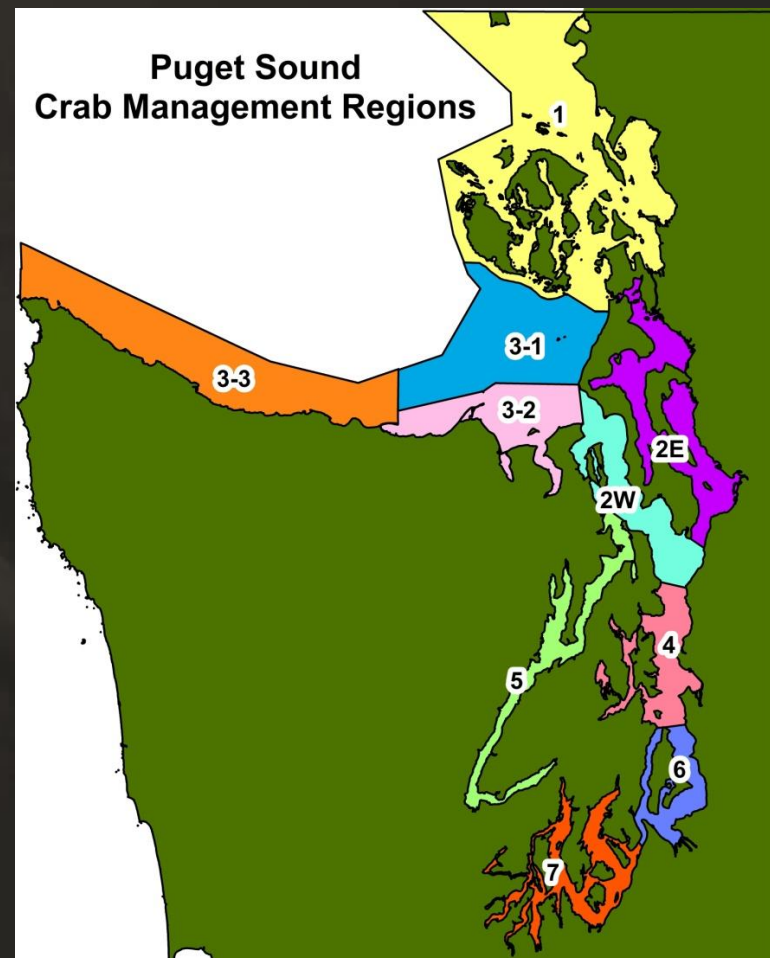


2017 Dungeness Crab Harvest for State Fisheries by Region

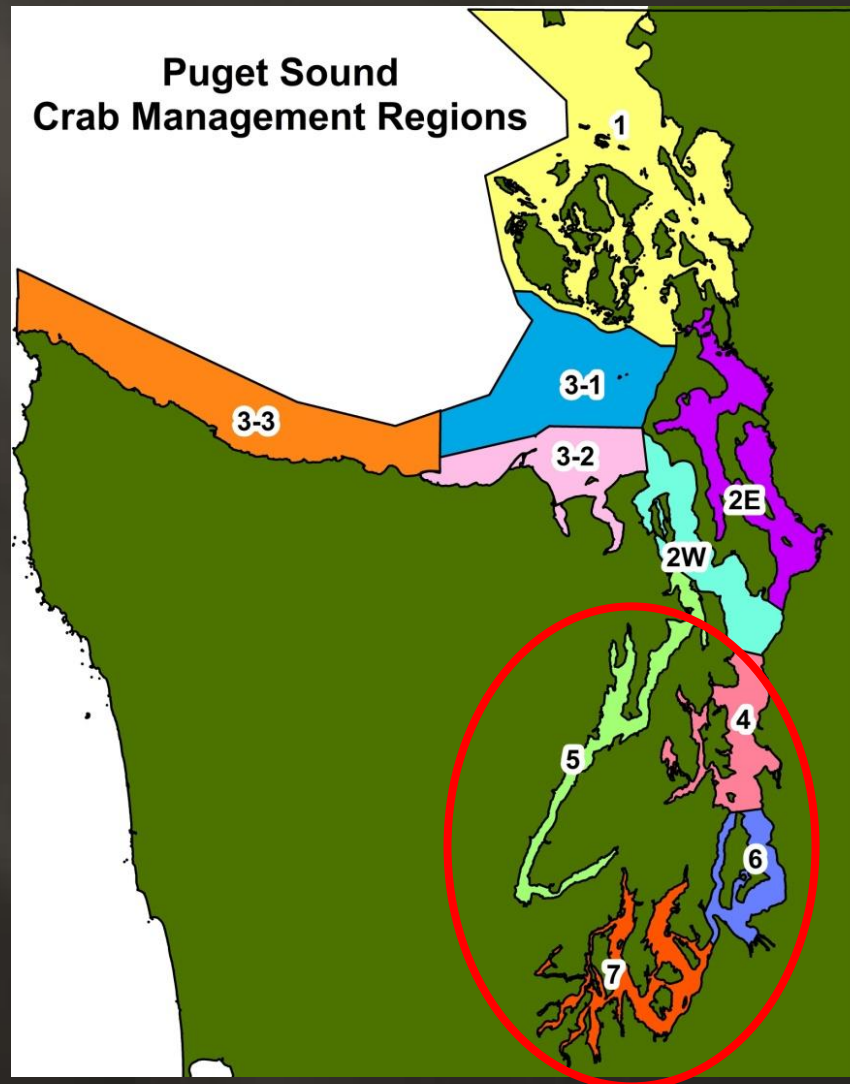


Recreational and Commercial Fishery Openings in 2017

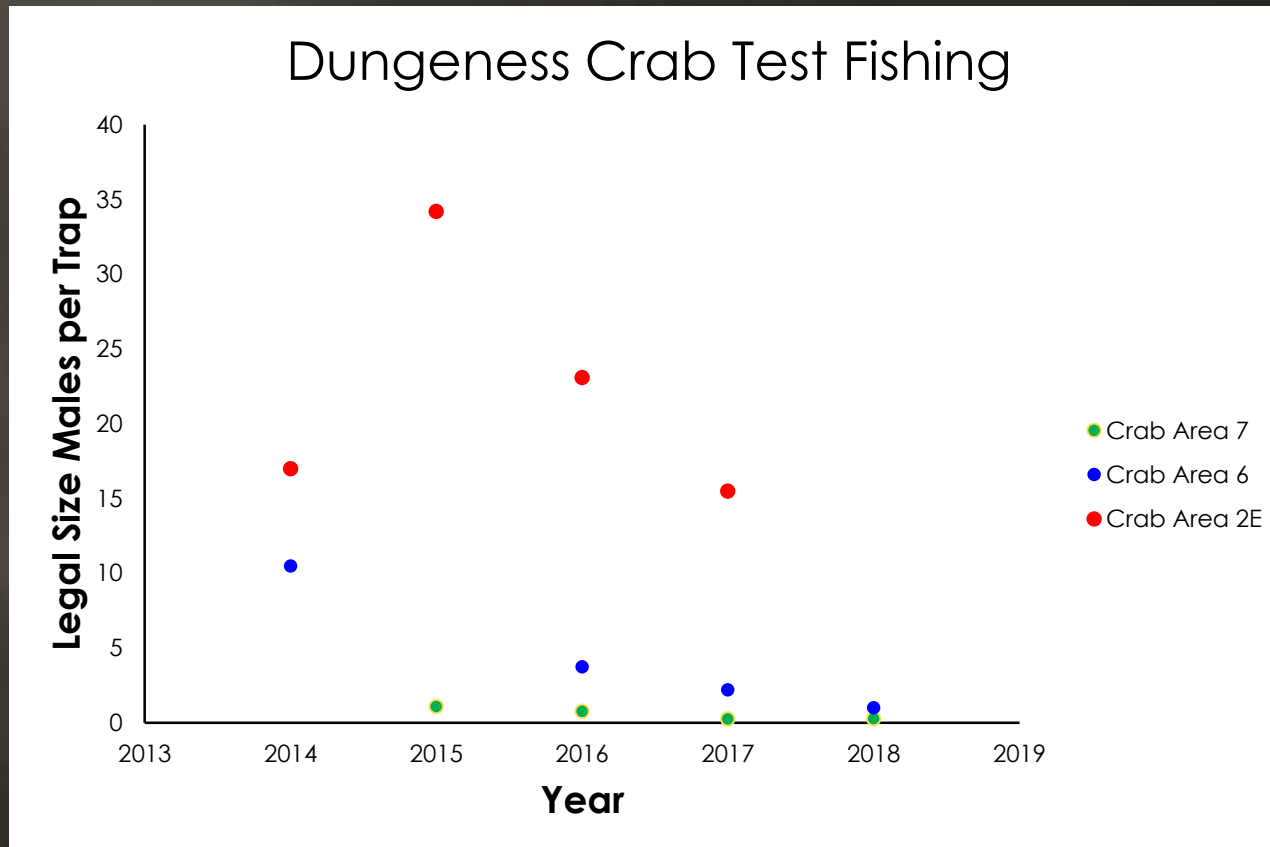
Region	Summer Recreational Season	Winter Recreational Season	Winter Commercial Fishery
1	Yes	Yes	Yes
2E	Yes	Yes	Yes
2W	Yes	Yes	Yes
3	Yes	Yes	Yes
4	Yes	No	
5	Yes	No	
6	Yes	No	
7	Yes	No	



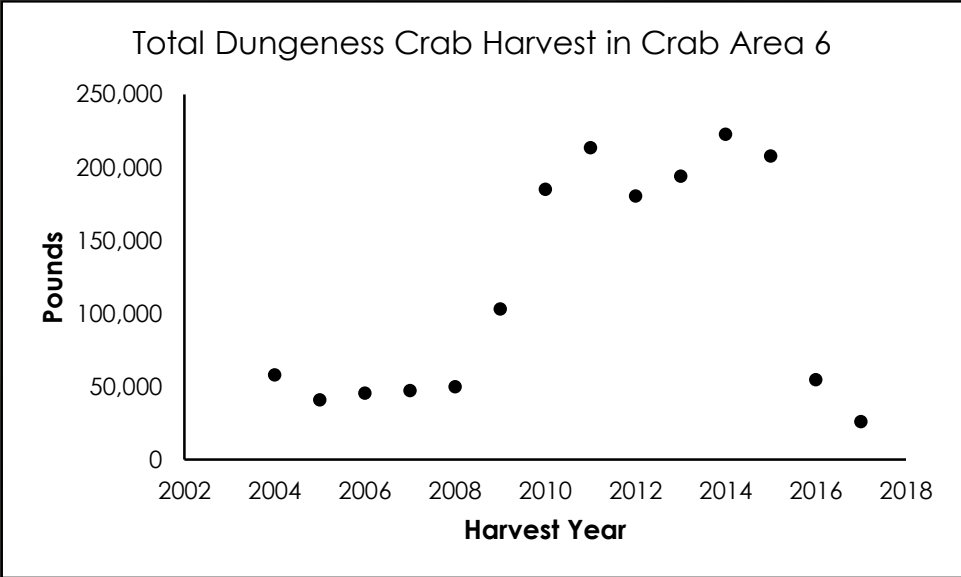
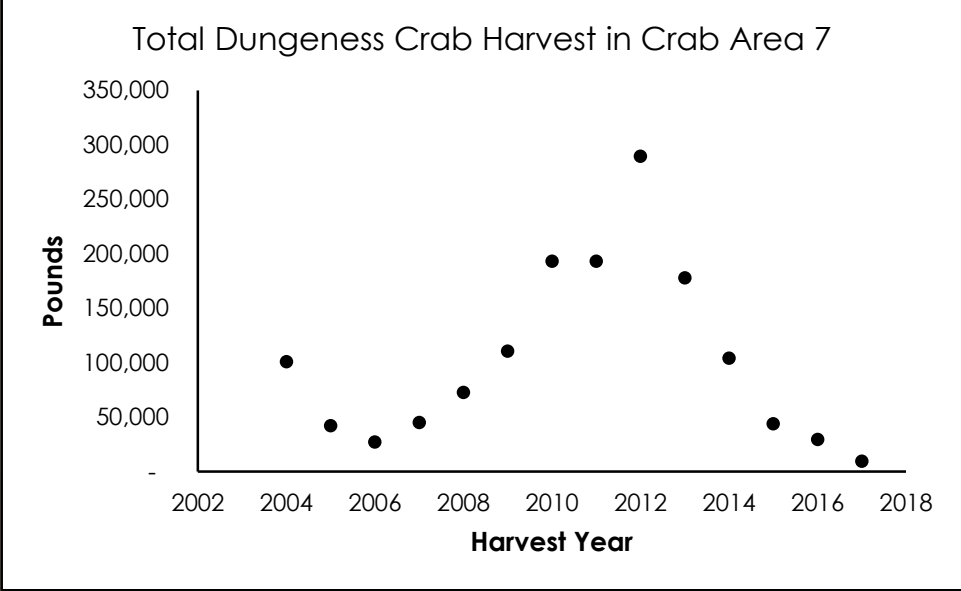
Declining abundance in South Puget Sound and South Hood Canal



Declining Dungeness crab abundance in South Puget Sound compared to the Whidbey Island area

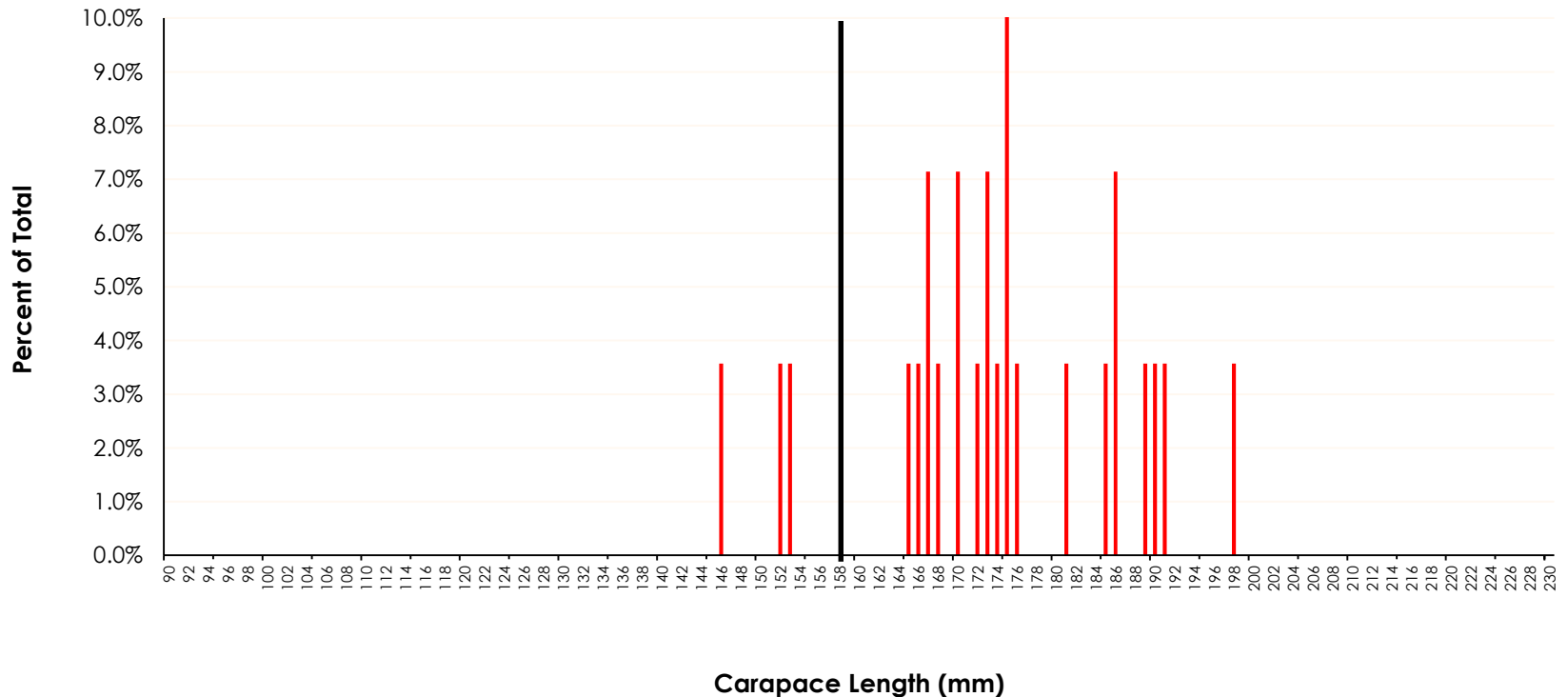


Declining Dungeness crab harvest in South Puget Sound



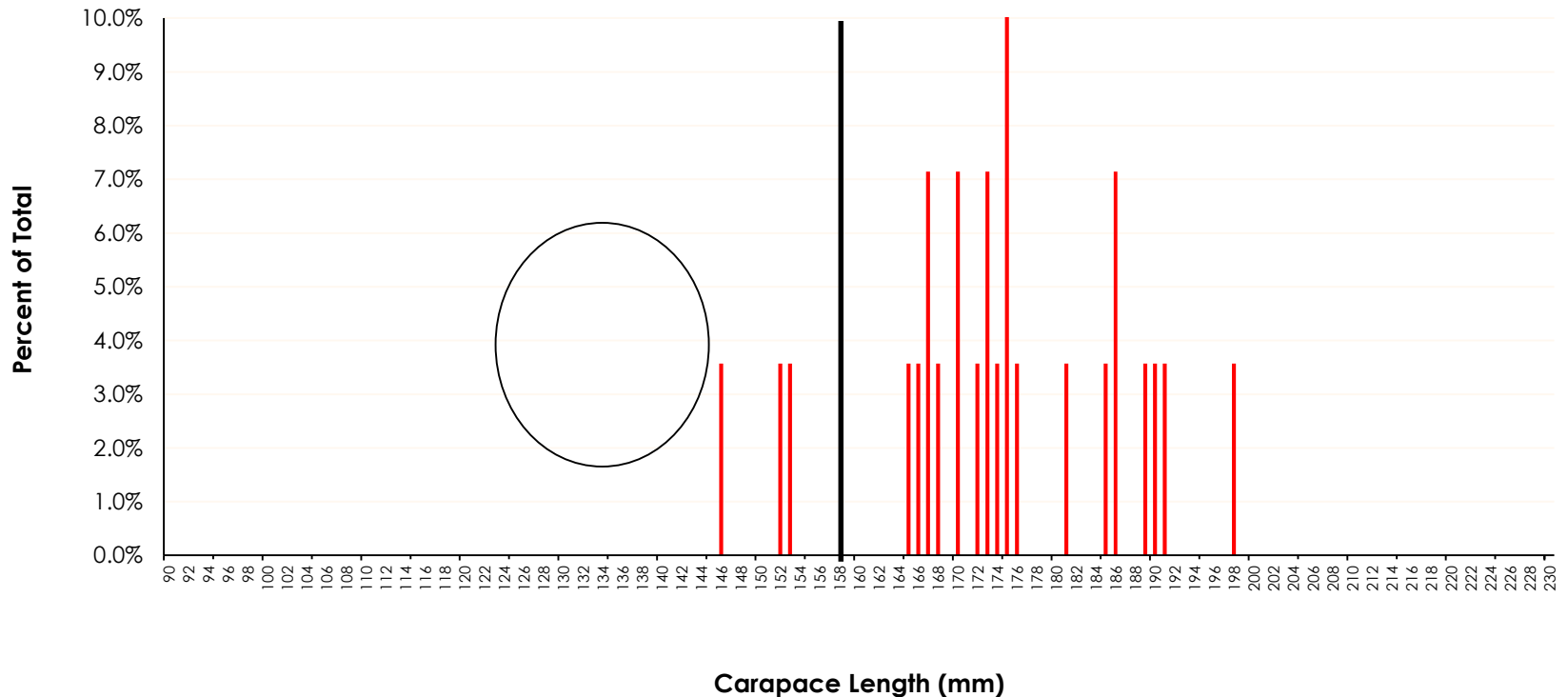
Lack of Dungeness crab recruits in South Puget Sound

2018 Size Frequency of Male Dungeness Crab WDFW Test Fishery



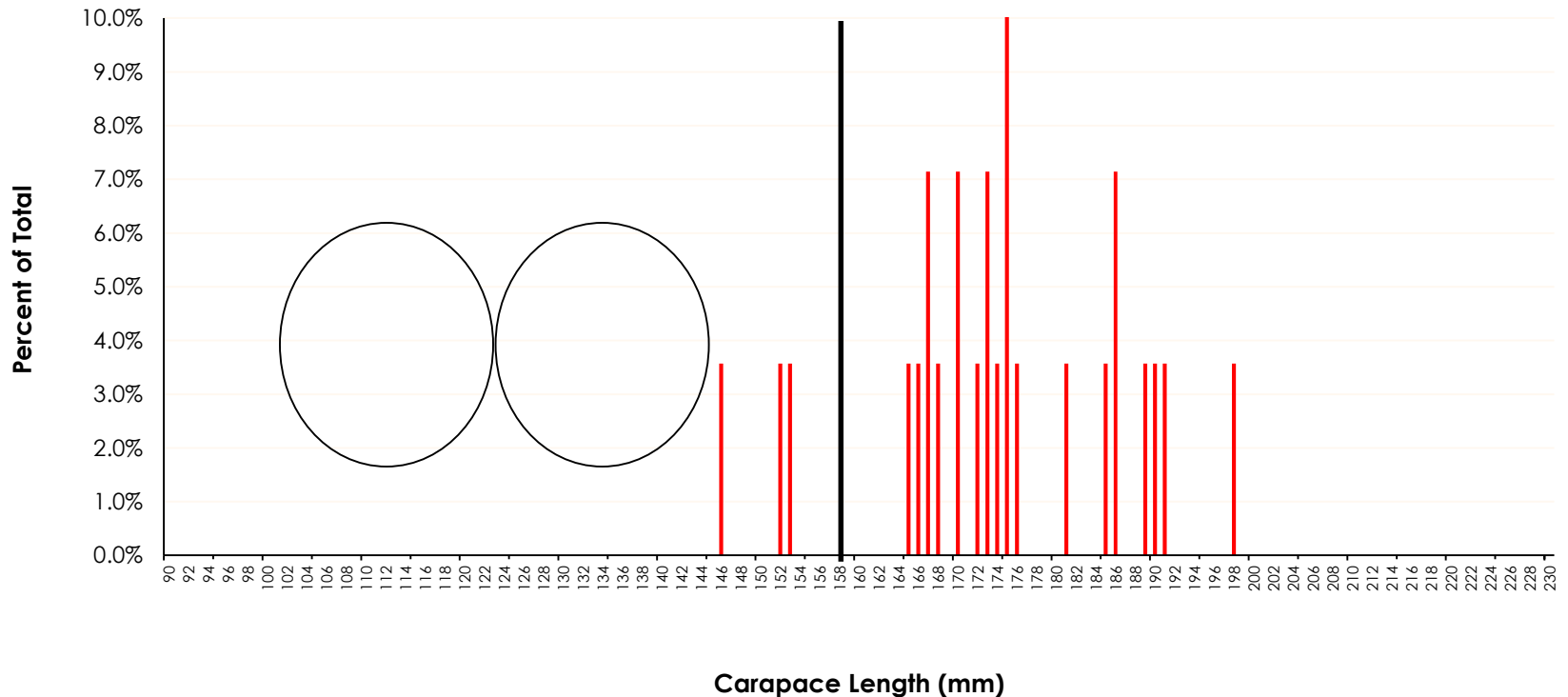
Lack of Dungeness crab recruits in South Puget Sound

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Lack of Dungeness crab recruits in South Puget Sound

2018 Size Frequency of Male Dungeness Crab WDFW Test Fishery



2009 – 2017 Recreational Dungeness Crab Catch Card Statistics

	Season	CRCs Issued	CRCs Returned by mail and drop-offs	CRC Reported Internet	Percent Returns (Internet + Returned)
Summer	2009	236,665	37,128	72,172	45%
	2010	208,462	29,406	77,472	52%
	2011	230,355	31,222	89,095	52%
	2012	200,711	26,504	79,895	53%
	2013	214,692	26,236	90,379	54%
	2014	213,741	25,276	91,270	55%
	2015	232,621	25,685	94,336	52%
	2016	216,977	23,734	90,262	53%
	2017	215,929	33,252	72,601	49%
Winter	2009	89,259	11,909	27,382	44%
	2010	70,763	9,633	27,346	52%
	2011	28,514	4,675	13,899	65%
	2012	27,711	4,508	13,357	65%
	2013	29,638	4,419	15,223	66%
	2014	35,371	5,040	17,401	63%
	2015	36,398	5,039	18,284	64%
	2016	26,591	5,777	10,577	62%
	2017	23,277	4,431	9,746	61%

Number of “New” Recreational Crab Fishers 2010-2017

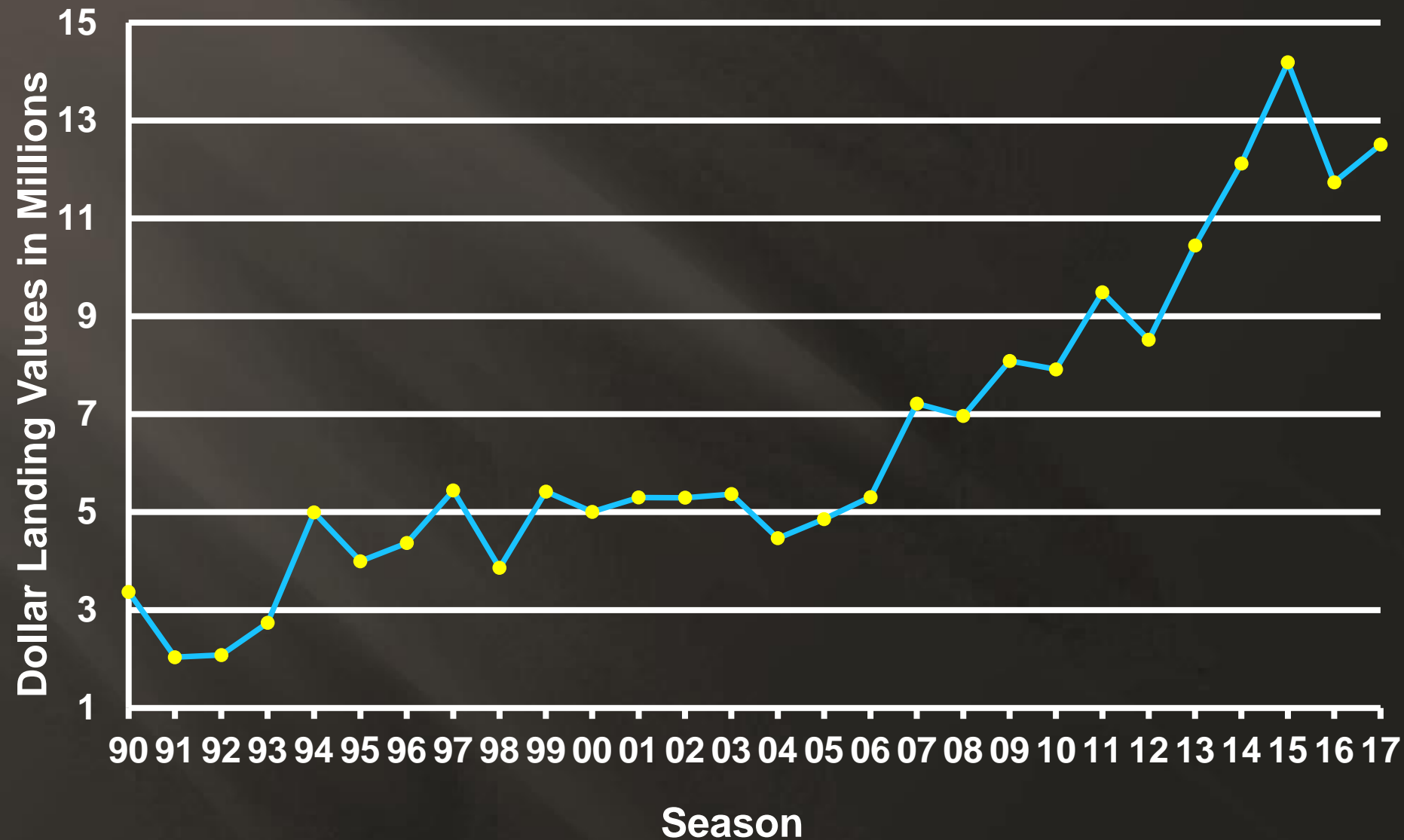
Season	Total Crab Endorsements Issued	New Recreational Crab Fishers	Percentage New Recreational Crab Fishers
2010	213,013	73,845	34%
2011	237,129	82,944	35%
2012	209,957	57,548	27%
2013	214,685	62,291	29%
2014	223,184	64,133	29%
2015	243,043	70,613	29%
2016	223,443	59,187	26%
2017	222,222	61,994	28%

Number of Puget Sound Commercial Dungeness Crab Licenses Owned by Individual Fishers or Companies

- Limited entry fishery since 1981
- Limited to 249 transferable permits

Number of Licenses Owned	2017 Season	
	Number of Owners	Number of Licenses
1	70	70
2	44	88
3	6	18
4	5	20
≥4	5	53
Totals	130	249

Total Adjusted Ex-Vessel Landing Values for the Puget Sound State Commercial Crab Fishery (1990-2017)



Education and Outreach



Education and Outreach Program Focus

- Reduce closed-season crabbing and loss of shellfish gear
- Resource conservation
 - Reduce possession of undersized or female crab
 - Promote rot cords/escape cords
- Resource allocation
 - Reinforce daily limits
 - Promote catch reporting

Puget Sound Closed Season Shellfish Pot Recovery by WDFW



	Patrol Days	Pots Recovered	Pots Per Patrol Day
2012	44	1,024	23.3
2013	28	405	14.5
2014	26	555	21.3
2015	25	1,099	44.0
2016	21	535	25.5
2017	77	2,535	32.9
Total	221	6,153	

Derelict Shellfish Gear Recovery by NW Straits Foundation



	Recreational Pots Recovered	Commercial Pots Recovered
2013	54	275
2014	259	73
2015	142	30
2016	268	250
2017	0	0
Totals	723	628

2017 Closed Season Shellfish Gear Recovery Challenges and Opportunities



- Secure storage and staff time is required to process the large volume of gear recovered
- Not able to identify fishers due to improperly marked buoys
- Fishers often assume gear was stolen
- Removing gear does provide an educational opportunity when owner are contacted
- Removing gear prevents continuous fishing by derelict pots and reduces unintended crab mortalities



2017 Education and Outreach Program

wdfw.wa.gov/fishing/shellfish/crab



Fishing Hotline
[360-902-2500](tel:360-902-2500)

**Shellfish Rule
Change Hotline**
[1-866-880-5431](tel:1-866-880-5431)

More Hotline Information...

For more information on fishing, please contact the WDFW Fish Program.
[360-902-2700](tel:360-902-2700)
Fish Program District Biologists

For fishing regulation questions, e-mail us at:
fishregs@dfw.wa.gov

For all other questions and comments, e-mail us at:
fishpgm@dfw.wa.gov

Crabbing is one of Puget Sound's most popular recreational fisheries. Each year, sport fishers catch more than a million pounds of Dungeness crab, using pots, ring nets and – in the case of wade and dive fishers – their bare hands.

In addition to meeting [licensing requirements](#), everyone who fishes for crab in Puget Sound must carry and complete [catch record cards](#) to account for all Dungeness crab they catch. Recent changes in the reporting system now in effect:

- **Two-card reporting system:** All sport crabbers fishing in Puget Sound are required to report their Dungeness crab catch on separate summer and fall/winter catch record cards at the end of each season. The new cards are separate from the multi-species card used for recording catches of salmon, halibut and other fish. People of all ages who have a crab endorsement and received a catch record card are required to make a report even if they did not go crabbing or catch any crab.
- **On-line reporting:** Sport crabbers can either report their information on the [WDFW crab reporting website](#) or mail in their catch cards. The website address for reporting crab catches is printed on the catch record card along with reporting deadlines.

The reporting site will only accept catch reports during two time periods. **Summer Catch Record Cards** can only be entered from **Labor Day through October 1st**. **Winter Catch Record Cards** can only be entered from **January 1st through February 1st**. The reporting site will allow you to view your reporting history at any time.

- **No coastal reporting:** Catch record cards are required for those fishing for Dungeness crab along the Strait of Juan de Fuca and Puget Sound, which includes marine area 4 (east of the Bonilla-Tatoosh line) and marine areas 5-13. They are not required along the coast, which includes marine areas 1-3 and marine area 4 (west of the Bonilla-Tatoosh line).
- **Failure to report penalty:** If crabbers fail to report their *summer or winter* harvest, they will be assessed a \$10 penalty with the following year's license purchase.

Fishery managers rely on individual catch record card reports to estimate recreational harvest and to set future crabbing opportunities. By completing catch record cards, fishers play a vital role in maintaining sustainable harvest opportunities.

The Recreational Crab Fishery i...



■ KNOW BEFORE YOU GO!

- [Crabbing in Puget Sound](#) (Sport fishing guide) PDF
- [Puget Sound Recreational Dungeness Crab Guide](#) PDF

■ REPORT YOUR CATCH

Catch reports are only accepted during two time periods:

- **Summer Catch Record Cards**
Labor Day through October 1st
- **Winter Catch Record Cards**
January 1st through February 1st

[Online Puget Sound Crab Reporting](#)

- [Dungeness Crab Catch Record Card Information](#)

■ RELATED INFORMATION

- [Statewide Harvest Rules](#)

2017 Education and Outreach Program



Capturing, measuring, and sorting

Crabs must be sorted and all undersize males, softshell crabs, and female Dungeness crabs must be released immediately back to the water. It is also illegal to keep only the claws of crabs.

Female crabs can be identified by their wider abdominal flap as shown in Figure 2. To measure male crabs, use a crab caliper available from most sporting goods vendors. Measure the distance inside the points as shown in Figure 3. **Do not measure to the tips of the points.** The minimum size for male Dungeness crabs in Puget Sound is 6 1/4 inches. Estimating or using rulers and/or dollar bills is unwise, could result in possession of undersize crab, and a fine.

When releasing crab, take care to gently place them back to the water. If crabbing from a pier, this may require lowering them down with a bucket and line.

Recording your Dungeness catch

Puget Sound crabbers need to record all Dungeness crab kept on their catch record card (CRC).

Immediately after retaining a Puget Sound Dungeness crab, it must be recorded on your CRC in ink. This must be done before you put the trap back in the water. Record the Marine Area, month, and day in the first columns. Check off each Dungeness crab as it is kept. **Do not record Red Rock crab or any other species of crab on a CRC.** When done for the day, tally all the checkmarks and record the total Dungeness crab kept.

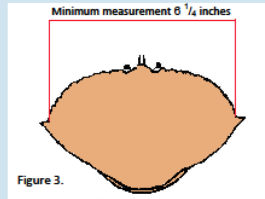


Figure 3.

Transporting, cleaning and cooking

Keep crabs cool and moist until they are cooked. Use seawater soaked towels with ice on top. Do not submerge your catch in seawater, as crabs will quickly deplete oxygen and die unless the water is aerated.

Crabs may be cleaned before or after cooking. For the cleanest and safest product, WA Dept. of Health advises to kill and clean your crab before cooking.

If you decide to clean crabs in the field, you must keep the shell to prove the crab was legal to harvest. Kill the crab with a sharp blow to the middle of its underside with a cleaver or similar object. Pull the top of the shell off from the back towards the front. Break the crab into two parts down the midline. Remove the viscera, mouthparts, tail and gills. Rinse the body if desired.

Boil crabs in salt water (3 to 5 ounces of salt per gallon). Cook for a total of 12-15 minutes with at least 3 of those minutes being after the water returns to a rolling boil. After cooking, immerse them into cold water for about 2 minutes to stop the cooking process and loosen the meat from the shell.

Reporting your catch to WDFW

Crabbers must report their Dungeness crab catch by the date printed on the Catch Record Card. If you fail to do so, an administrative penalty will be applied toward your next purchase of a crab endorsement. You can report your catch by:

- dropping off the CRC at any WDFW regional office.
- mailing the CRC to the address shown on the card.
- reporting online at the following address: <https://fishhunt.dfw.wa.gov/wa/crabreport>

Report illegal activity

Help protect our crab resources. Report illegal activity with as much detail as possible as soon as it occurs. Call 1-877-933-9847.

For more information and rules about harvesting Red Rock crabs in Puget Sound please visit [our website at](http://ourwebsiteat.com) -

www.wdfw.wa.gov



Washington Department of Fish and Wildlife

Sport Fishing Guide

Crabbing in Puget Sound



Brochure Version 1.0 December 23, 2010

2017 Education and Outreach Program/Derelict Gear

**CATCH
MORE
CRAB!**

Seven helpful tips to prevent your crab pot from becoming one of the 12,000 pots lost in Puget Sound each year:

- **Avoid high traffic**, marine transit and ferry lanes.
- **Check tides and currents.** Avoid crabbing during strong tidal changes and currents.
- **Make buoys more visible.** Add a second buoy or a stick and flag.
- **Use a weighted line** to sink below the surface and avoid being cut by passing boats.
- **Weight your crab pots** so they do not move with currents or tidal changes.
- **Use longer line.** Use 1/3 more line than the water depth to allow for changes in tides and currents.
- **Secure lid and escape panels with cotton (biodegradable) escape cord.** Crabs can escape from lost pots after the cord degrades.



**KEEP YOUR POTS
CATCH MORE CRAB!**

12,000 Crab Pots are Lost

in Puget Sound each year. A single lost crab pot can kill up to 50 crabs until it deteriorates – that's 180,000 harvestable crabs that could otherwise make it to the dinner table!

The Northwest Straits Initiative

Since 2002, we have removed more than 5,700 derelict nets, 4,800 derelict crab pots and restored 830 acres of critical marine habitat.

Who We Are

A nationally-recognized conservation initiative, the Northwest Straits Initiative brings together scientists and community volunteers in northwest Washington, coordinated by a non-profit Northwest Straits Foundation, a state government partner Northwest Straits Commission, and seven county-based Marine Resources Committees.

Enter to win!

To be entered into a prize drawing for new crabbing gear, please complete the brief survey found at the following link: <https://goo.gl/iwvhXB>

To learn more about lost crab pots in Puget Sound visit www.derelictgear.org



for more information visit
derelictgear.org

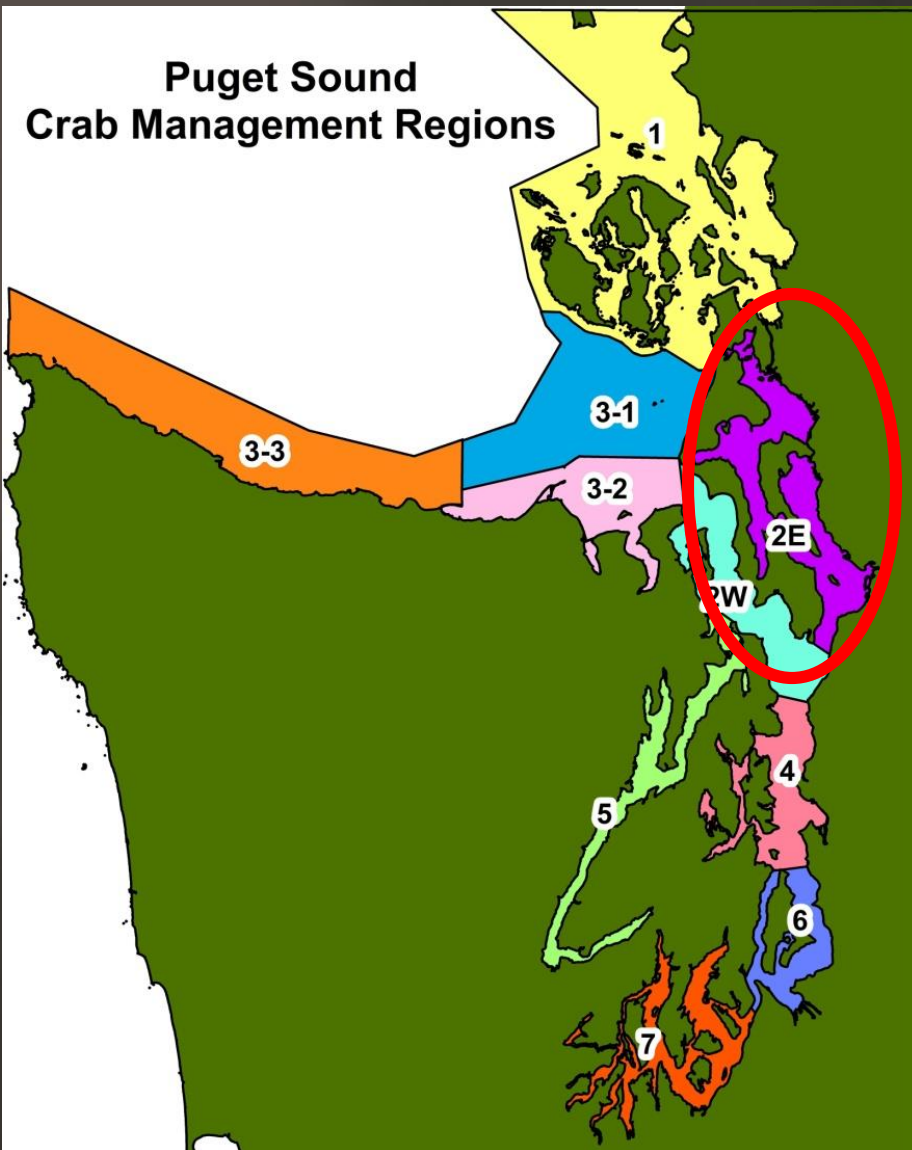


partners in marine conservation



1155 N. State St., 3rd. floor, Suite 702
B: Lincoln WA 98225
360.382.1025
www.nwstraitsinitiative.org

Crab Fishery Evaluation – 2017 Crab Creel



Crab Fishery Evaluation – 2017 Crab Creel Results

Catch Area	Harvest Estimates		Ratio	% of CRC
	CRC	Creel		
8-1	121,990	47,991	2.54	39%
8-2	108,483	107,138	1.01	99%
Totals	230,473	155,129	1.49	67%

Crab Fishery Evaluation – 2017 Crab Creel Results

Additional Results:

Harvest of sub-legal crabs was persistent throughout July, ranging from 2.3% to 6.7% of observed landings.

Harvest of soft crabs was 3.2% of observed landings.

Harvest of female crab was only 0.09% of observed landings.

0.8% of harvesters did not have CRCs.

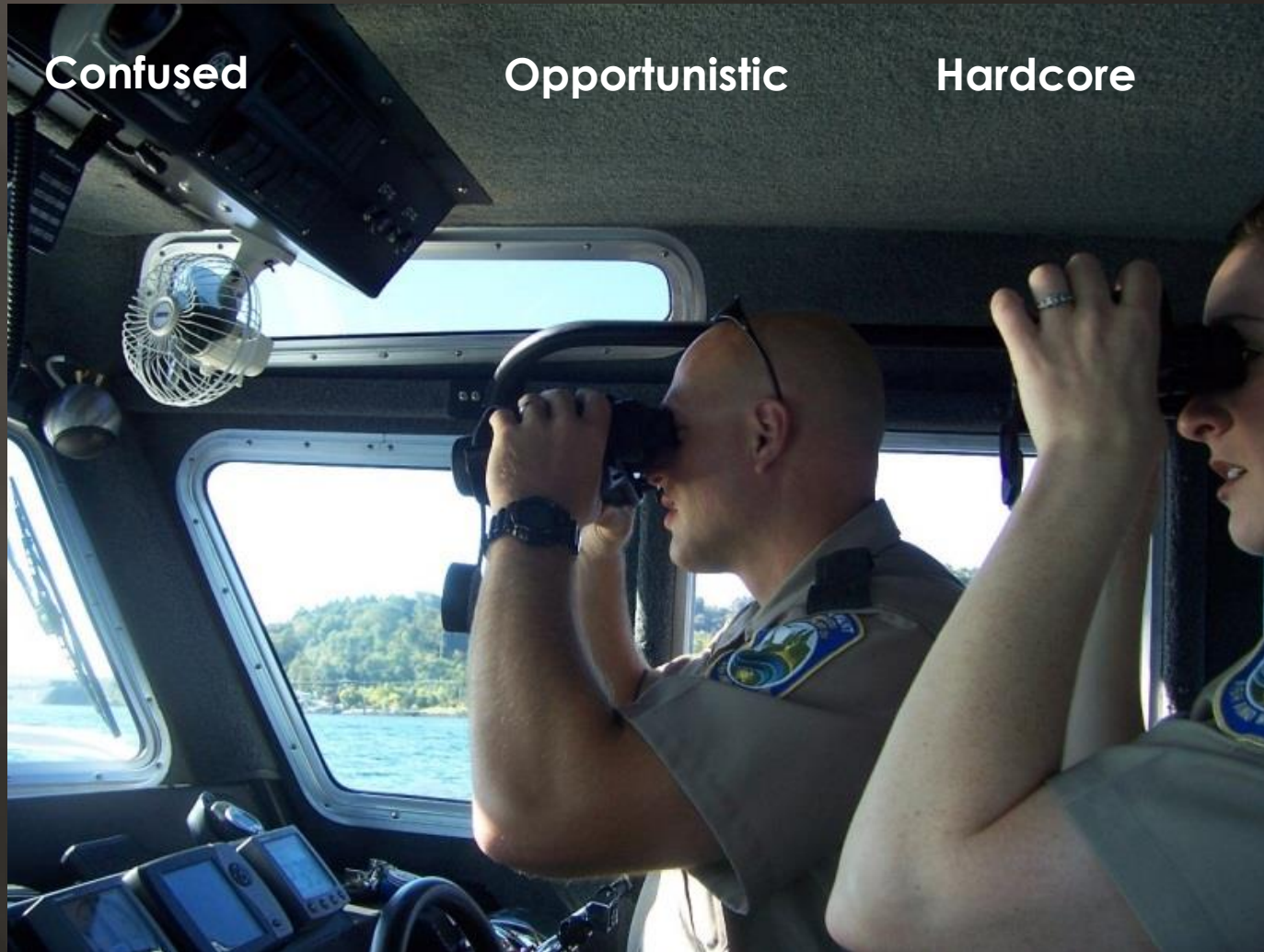
Completion of CRCs at time of landing was 97.2%.

Enforcement



Crab Fishery Enforcement

Recreational Fisher Violator Types



Confused

Opportunistic

Hardcore

WDFW Enforcement Crab Rule Compliance Emphasis Patrols



- 25 officers involved in summer 2017 patrols
- 77% on-the-water contacts, 23% land-based

	2013	2014	2015	2016	2017
Fishers Contacted	3,494	4,809	3,659	2,457	1,234
Number of Crab checked	4,013	5,952	6,717	3,885	1,329

Results of Enforcement Emphasis Patrols

Category	Enforcement Contacts (Successful Crabbers Only)						
	2011	2012	2013	2014	2015	2016	2017
Possession of undersize crab	8%	9%	8%	9%	7%	6%	7%
Possession of female crab	0.9%	0.8%	1%	1%	1.2%	0.8%	0.4%
Exceeding daily limit	3.2%	1.7%	1.4%	1.6%	2.6%	1.5%	1.2%
CRC violation (fail to record)	19.4%	19.9%	16.5%	17.4%	17.2%	16.9%	16.7%

Note: Proper marking of recreational gear (buoys) is a continuing problem

Closed Season Pot Sweeps – A Proactive Approach



- **Closed season shellfish pot emphasis patrols**
- **Includes all Marine Areas**
- **Recovery efforts focused on removal of unauthorized-lost-illegal gear before it becomes "derelict"**
- **Actual % of derelict pots (i.e. lost or abandoned) is unknown**

Additional Enforcement Effort



- Lost or abandoned
- Closed season poaching
- Illegal Foreign fishing
- Non-compliant gear
- Illicit Markets



The Illegal Shellfish Trade



Summary

- Recreational fisheries were open 5 days per week in most regions from July 1 through Labor Day
- Winter recreational openings occurred in regions 1, 2, and 3 only
- Commercial fishery occurred in regions 1, 2, and 3 as per policy C-3609
- In partnership with organized angler groups and NGOs an extensive crab fishery education and outreach program was continued in 2017
- Recreational rule compliance needs improvement
 - “immediate” recording of crab on the catch record card (CRC)
 - Proper marking of recreational gear
- Closed season gear removal patrols continue to be an area of emphasis

Questions

