

Recreational Crab & Shrimp Advisory Committee Meeting

March 10, 2020

- **Introductions (10 min)**
 - Staff
 - Advisors
- **House Keeping (10 min)**
 - Guidelines
 - Advisor Roles
 - Communication
- **Crab (60 min)**
 - 2019/2020 Season Overview
 - Management & Enforcement
 - 2020/2021 Season Outlook
 - Derelict Gear Rule Updates
 - Research and Collaborative Activities
- **Shrimp (60 min)**
 - 2019/2020 Season Overview
 - Management, Methods, & Enforcement
 - 2020/2021 Season Outlook
- **Other Items (30 min)**
 - Commission Presentations
 - Website
 - Communication & Education with Recreational Users
- **Wrap-up and next Steps (10 min)**

Introductions

- New Crustacean Team Staff
 - Aaron Dufault – Shellfish Program Director
 - Daniel Sund – Commercial Crustacean Biologist
- Newest Recreational Advisors
 - Phli Andrus, Chimacum
 - Christine Arneson, Burien
 - Larry Bucklin, University Place
 - Dave Drewry, Port Townsend
 - James Ianelli, Seattle
 - Pat Patillo, Olympia
 - Steve Russo, Snohomish

House Keeping

- Meetings 2 times per year
- Opportunity to share information and get advice on recreational fishery issues
- Keep it positive!
- Monthly newsletter
- Advisory Board Role
 - Advisory board organization – selecting a spokesperson
 - Single line of communication to WDFW staff

2019 / 2020 Season Overview – Rec Crab

Region	Marine Areas	Summer Opened	Summer Closed	Summer Harvest	Winter Opened	Winter Closed	Winter Harvest	Total Harvest
1	7	7/11 and 8/15	9/30	464,117	10/1	12/31	72,481	536,598
2E	8-1, 8-2	7/4	9/2	689,407	10/1	1/31	46,200	735,607
2W	9	7/4	9/2	81,494	10/1	12/31	12,584	94,078
3-1	6 N	7/4	9/2	2,235	10/1	12/31	376	2,611
3-2	6 SE	7/4	9/2	137,435	10/1	12/31	23,136	160,571
3-3	4, 5, 6 W	7/4	9/2	5,862	10/1	12/31	310	6,172
4	10	7/4	8/3	47,202			34	47,236
5	12	7/4	9/2	67,891	12/20	1/31	9,339	77,230
6	11			411			0	411
7	13			240			0	240

Includes 12,130 lbs. for Jan.

Includes 6,001 lbs. for Jan.

2019 / 2020 Season Overview – Crab

- Recreational: Reference handout with State recreational, State commercial, and Tribal totals to date. Includes EUC.

2019 / 2020 Season Overview – Rec Crab

- In-season Closures and Extensions
 - Marine Areas 8-1 / 8-2
 - Opened on July 4.
 - Closed on September 2 (usual).
 - Opened on October 1.
 - Closed on October 23.
 - Re-opened on November 28th through Jan 31 2020. No requirement to record on CRC for January.
 - Marine Area 12 and portion of 9 (Port Gamble/Port Ludlow)
 - Opened on July 4.
 - Closed on September 2 (usual).
 - Opened on December 20 through January 31 2020. No requirement to record on CRC for January.

2019 / 2020 Season Overview – Crab

State commercial crab harvest totals by Region

	Region 1	Region 2 East	Region 2 West	Region 3-1	Region 3-2	Region 3-3	Totals
State Com. Available	1,634,204	562,682	129,886	42,040	192,088	18,394	2,579,294
To Date Totals	1,661,616	562,590	128,995	42,610	194,789	13,492	2,604,092
Remaining Share	-27,412	92	891	-570	-2,701	4,902	-24,798

2019 / 2020 Season Overview – Crab

Daily State
commercial crab
harvest totals by
Region



2019 / 2020 Season Overview – Crab

- December 2019 2E Commercial Opener
 - December 10 through December 14
 - Approximately 97, 000 lbs of Quota remaining (after bump and set aside)
 - Harvesters required to:
 - Register
 - Report daily harvested crab (sold and held)
 - Stopped after 4 days to ensure recreational effort was accurately estimated.

Number of Registered Vessels	Number of Permits	Number of Participating Vessels	Total Harvester QR Landings	Total Buyer QR Landings	Total FT Landings
60	141	55	53,325	53,998	53,424

2019 / 2020 Season Overview – Crab

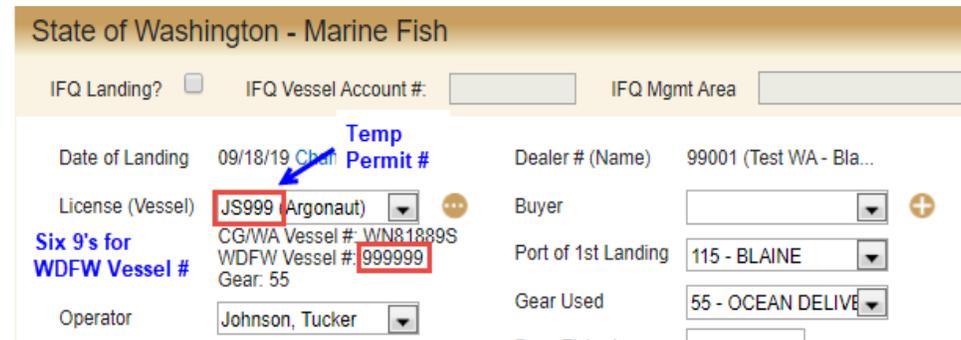
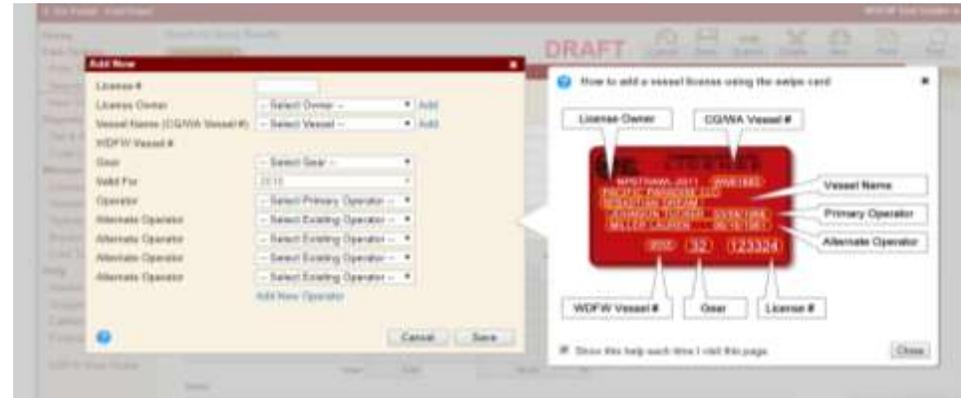
- January 2020 2E Commercial Opener
 - January 14 through January 19
 - Initial conservative target of 45,000 lbs
 - Harvesters required to:
 - Register
 - Report daily harvested crab (sold and held)
 - Stopped mid-day on Jan 19 due to weather and to limit a full day's harvest.

Number of Registered Vessels	Number of Permits	Number of Participating Vessels	Total Harvester QR Landings	Total Buyer QR Landings	Total FT Landings
49	110	44	49,182	40,310	46,200

2019 / 2020 Season Overview – Crab

Electronic Fish Tickets

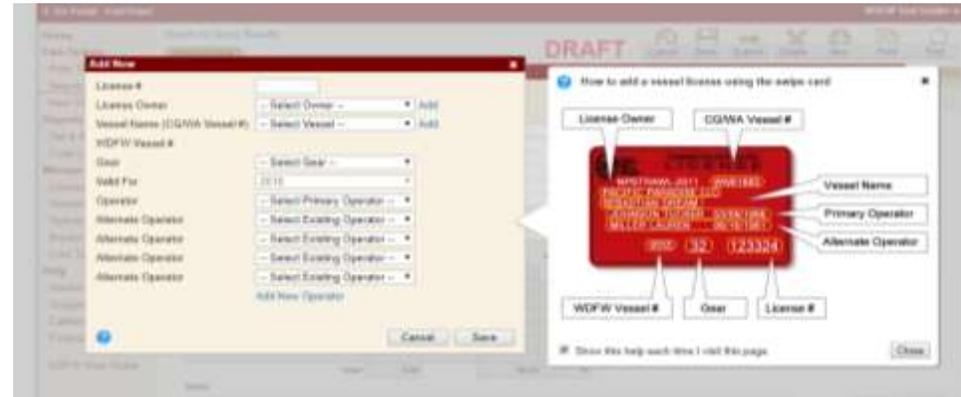
- Currently required for:
 - Groundfish
 - Halibut
- Voluntary for:
 - Coastal Crab
 - Pink Shrimp
 - Sea Urchins
 - Sea Cucumbers
 - Many more...
- Have not (yet!) been implemented for Puget Sound fisheries.



2019 / 2020 Season Overview – Crab

Electronic Fish Tickets

- Puget Sound limitations
 - Larger Number of Buyers (>700)
 - Wide array of infrastructure and technological adoption by buyers
 - More buying locations



State of Washington - Marine Fish

IFQ Landing? IFQ Vessel Account #: IFQ Mgmt Area:

Date of Landing: 09/18/19 **Temp Permit #** Dealer # (Name): 99001 (Test WA - Bla...)

License (Vessel): **JS999 Argonaut** Buyer:

Six 9's for WDFW Vessel # CG/WA Vessel #: WN81889S Port of 1st Landing: 115 - BLAINE

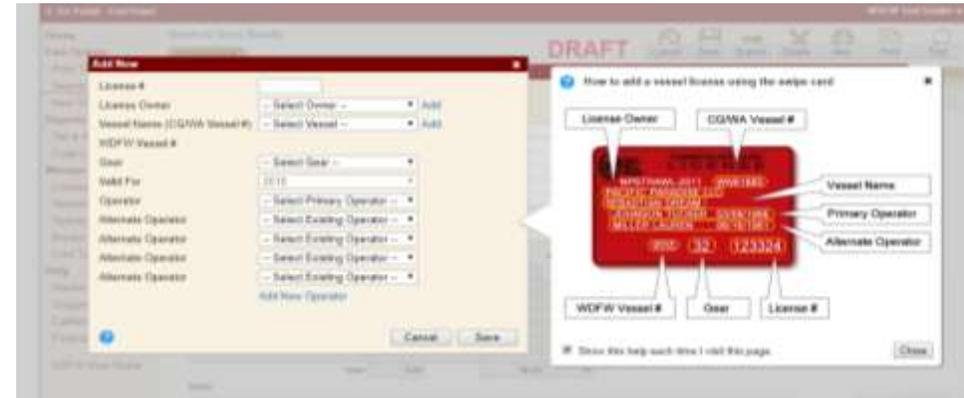
WDFW Vessel #: **999999** Gear Used: 55 - OCEAN DELIVE

Gear: 55 Operator: Johnson, Tucker

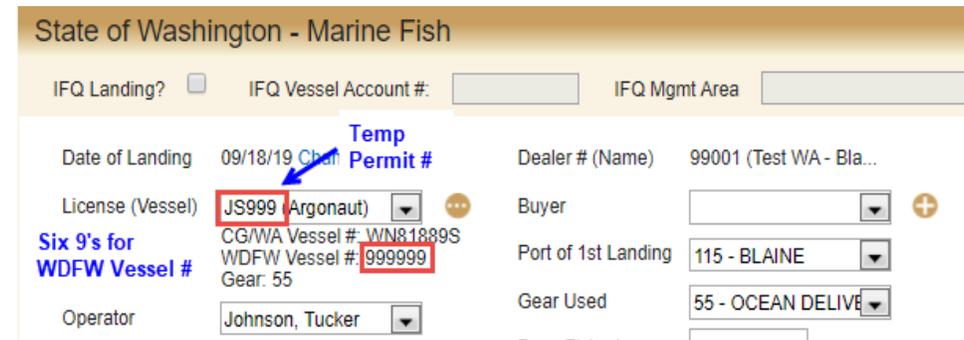
2019 / 2020 Season Overview – Crab

Electronic Fish Tickets

- Expand Pacific States Marine Fish Commission (PSMFC) e-ticket system access to commercial state crab fisheries.



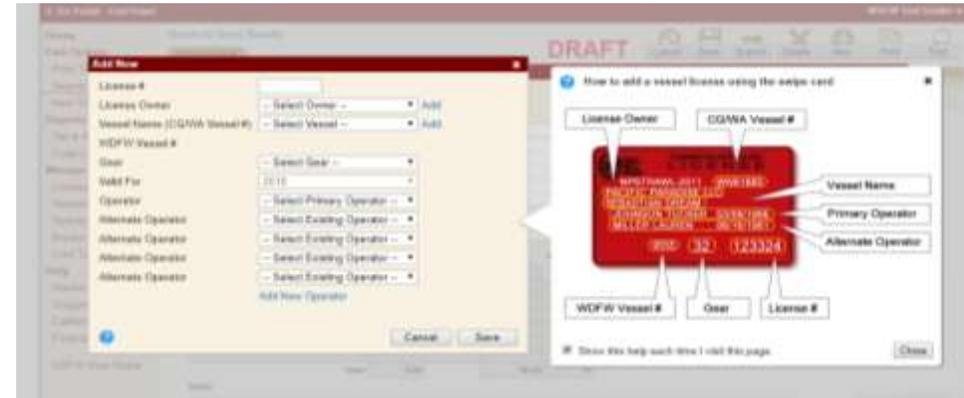
- Tentative phased implementation.
 1. Buyer outreach and system testing
 2. Voluntary expansion to state commercial buyers
 3. Require all tickets submitted as e-tickets.



2019 / 2020 Season Overview – Crab

Electronic Fish Tickets

- Working with the coastal crab program to cooperatively develop an e-ticket system that works for both our fisheries



- Mobile device capable
- Allow for e-signatures
- Cache tickets to allow for operation in areas with poor network connectivity
- Allow for multiple users

State of Washington - Marine Fish

IFQ Landing? IFQ Vessel Account #: IFQ Mgmt Area

Date of Landing 09/18/19 **Temp Permit #**

License (Vessel) **JS999 Argonaut** **Six 9's for WDFW Vessel #**

CG/WA Vessel # WN81889S
WDFW Vessel # **999999**

Gear: 55

Operator Johnson, Tucker

Dealer # (Name) 99001 (Test WA - Bla...)

Buyer

Port of 1st Landing 115 - BLAINE

Gear Used 55 - OCEAN DELIVE

2019 / 2020 Season Overview – Crab

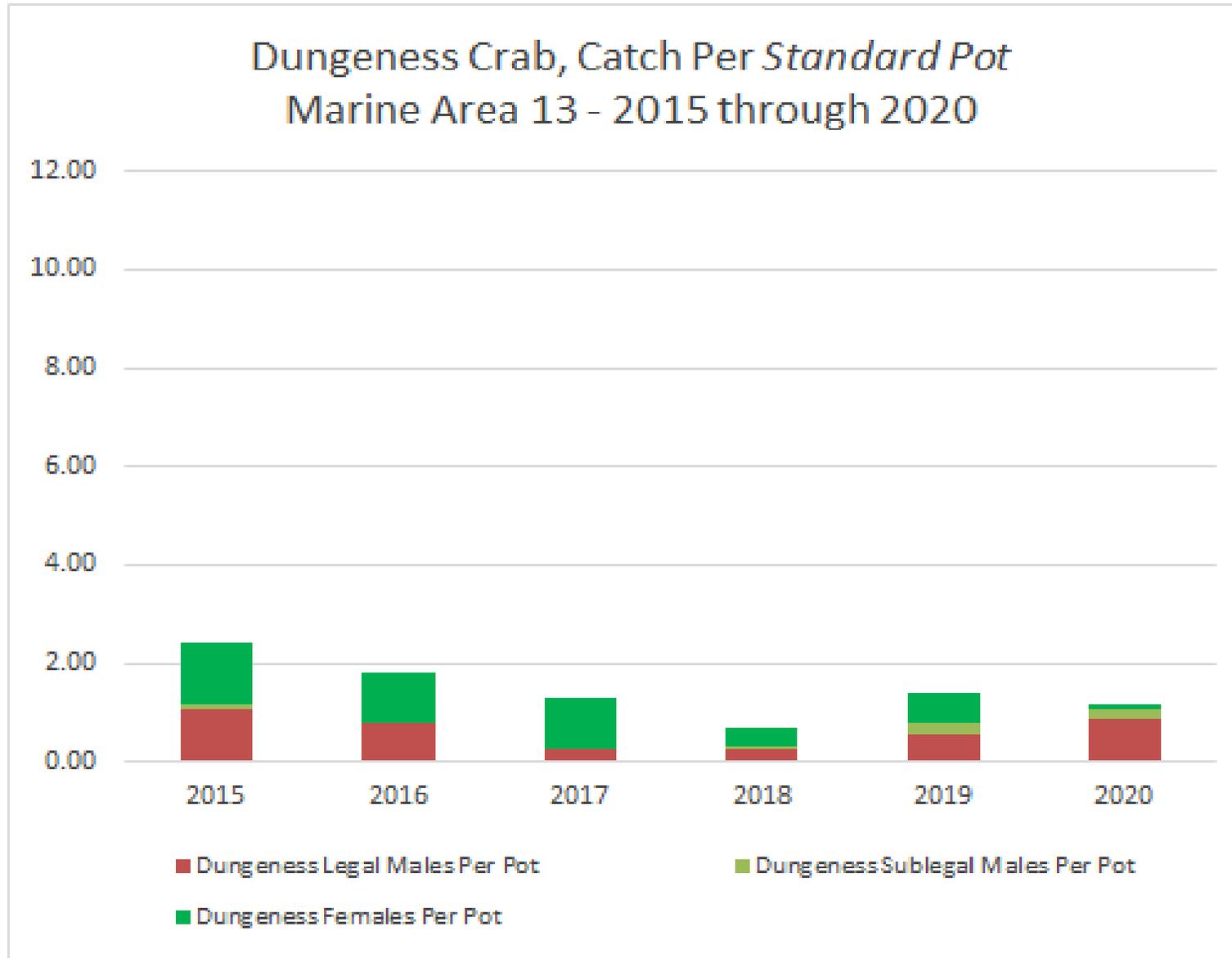
- Electronic Catch Reporting
 - What could it look like? (*Discussion*)
 - Mobile application
 - Desktop / Browser Reporting
 - Geo-referenced / Realtime reporting
 - How can we motivate participation by recreational users? (*Discussion*)
 - Education
 - Ease / Opportunity

2019 / 2020 Season Overview – Crab

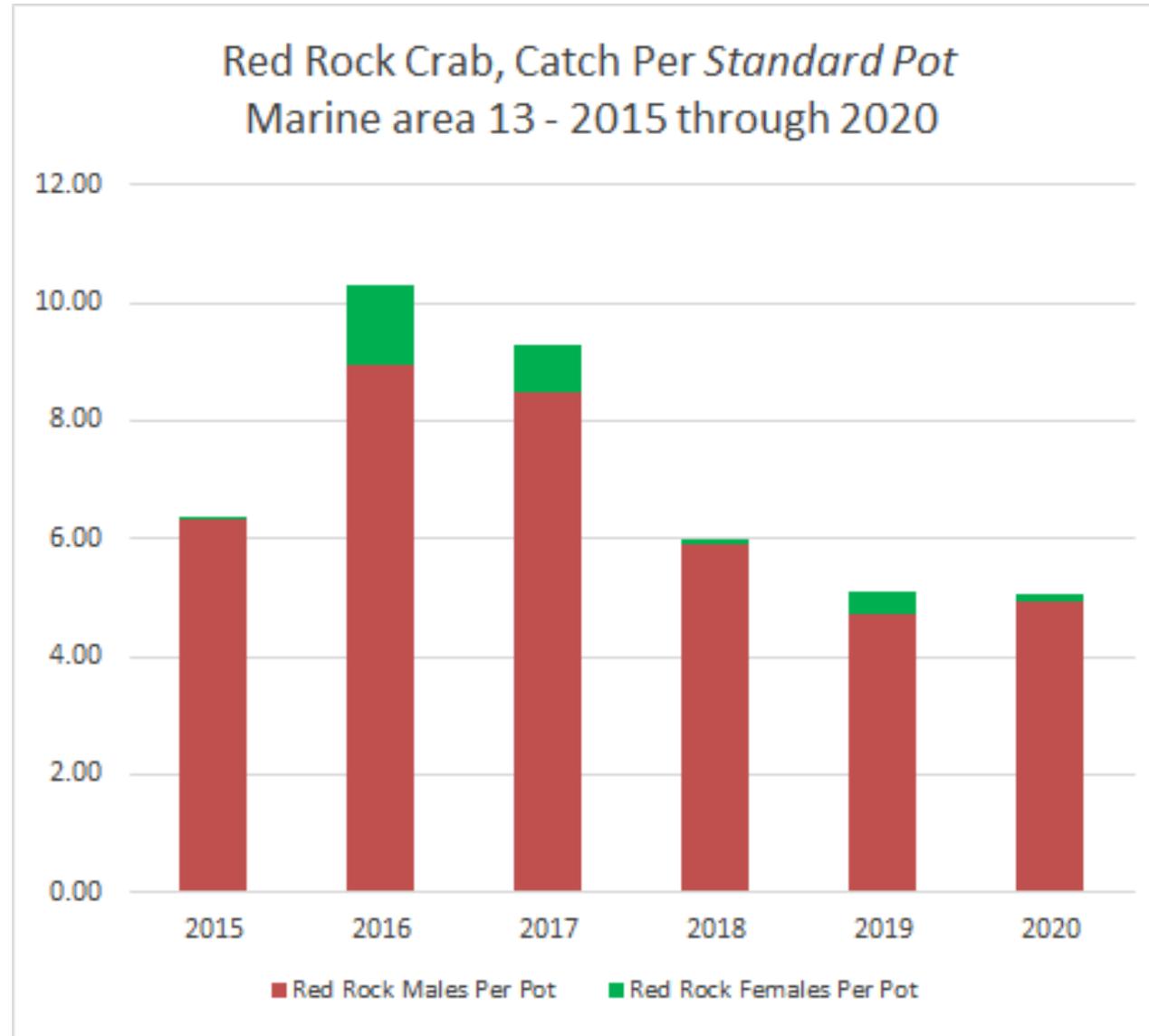
- State and Tribal Harvest

	1	2E	2W	3-1	3-2	3-3	Total
<i>State Commercial</i>	1,678,232	568,216	130,285	43,036	196,737	13,627	2,630,133
<i>State Recreational</i>	536,598	735,607	94,078	2,610	160,571	6,172	1,535,636
State Total	2,214,830	1,303,823	224,363	45,646	357,308	19,799	4,165,769
Tribal	2,072,806	1,292,779	220,043	30,799	315,910	10,207	3,942,544

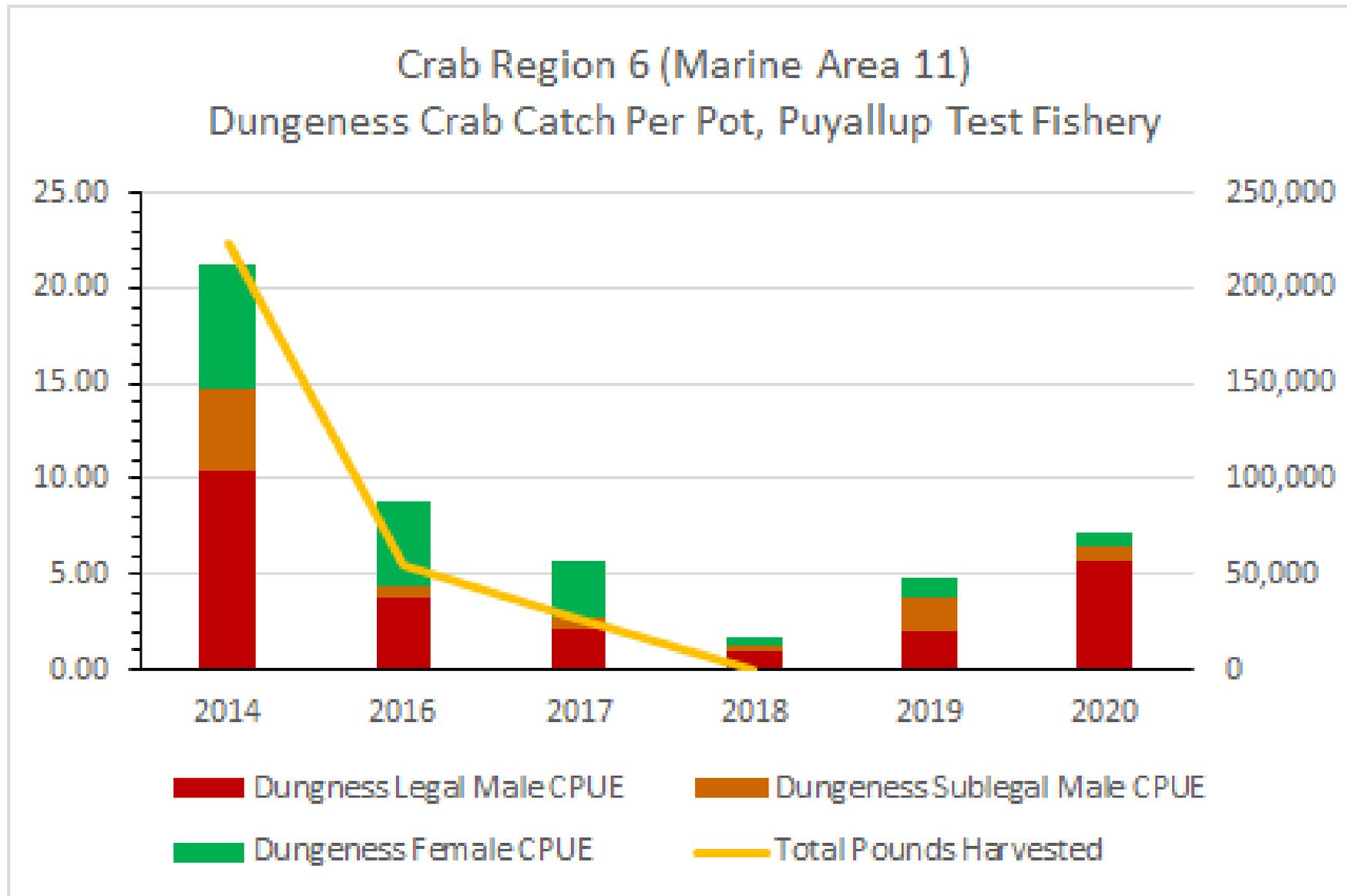
2020 / 2021 Season Overview – Crab Test Fishing



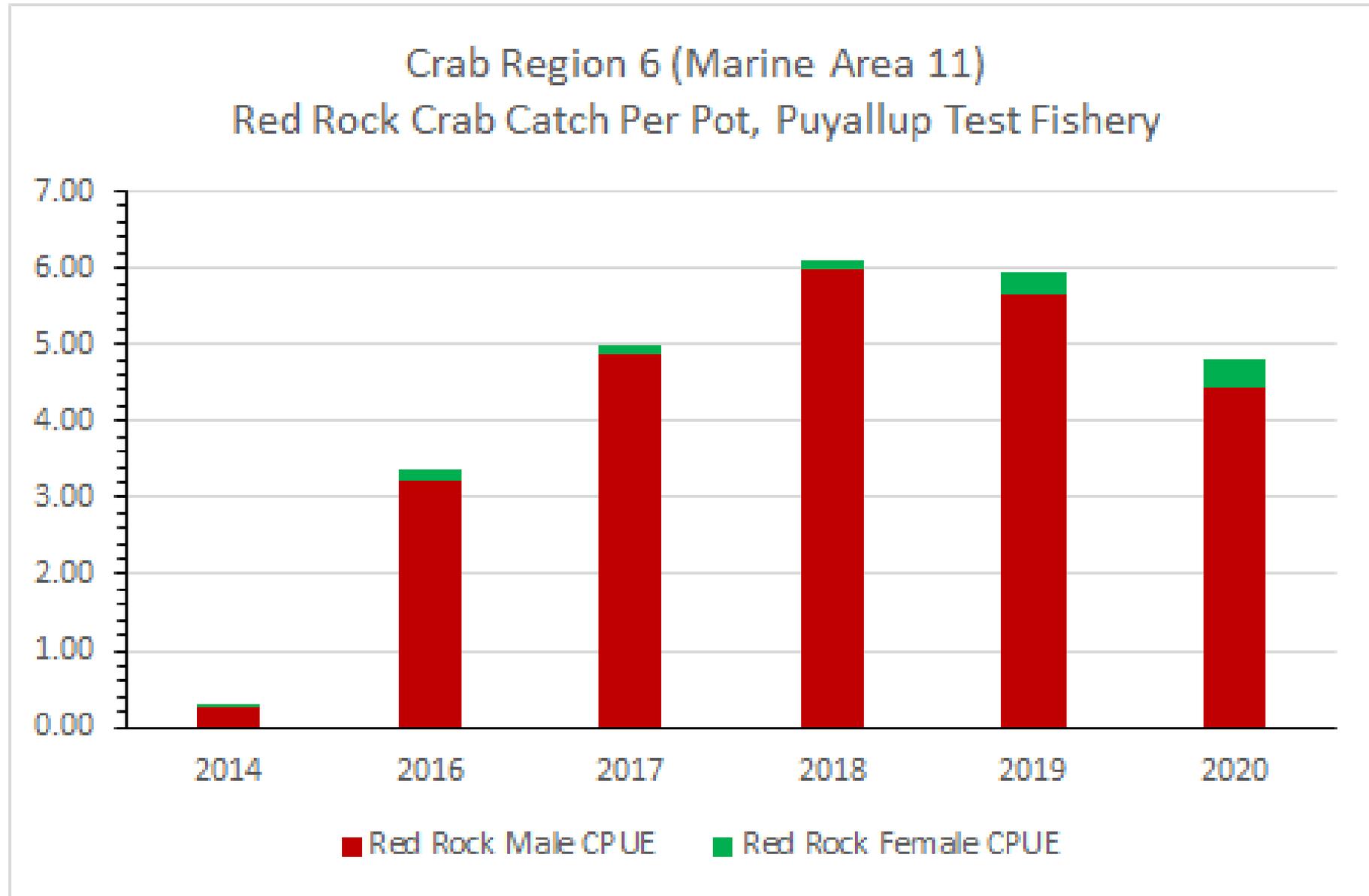
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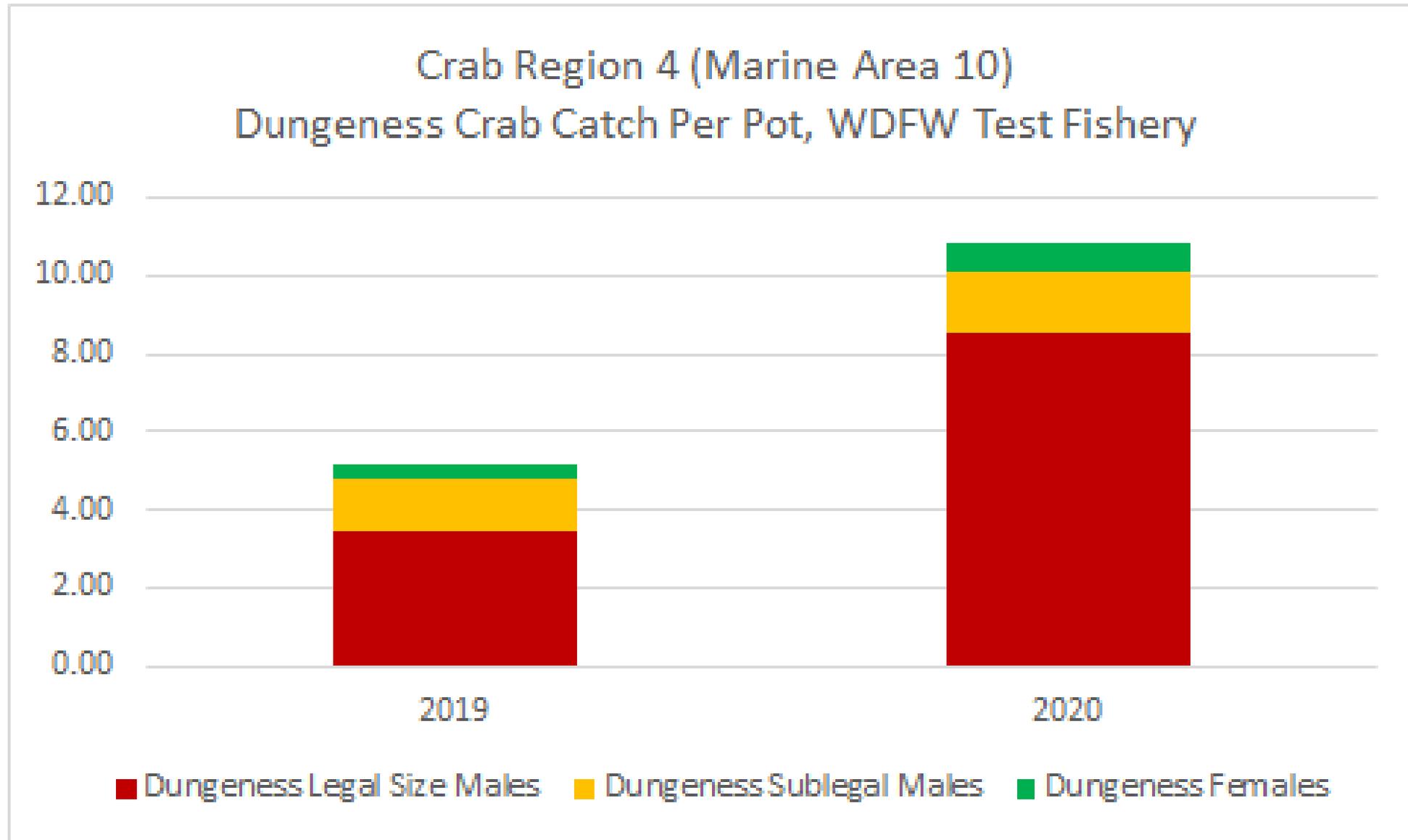
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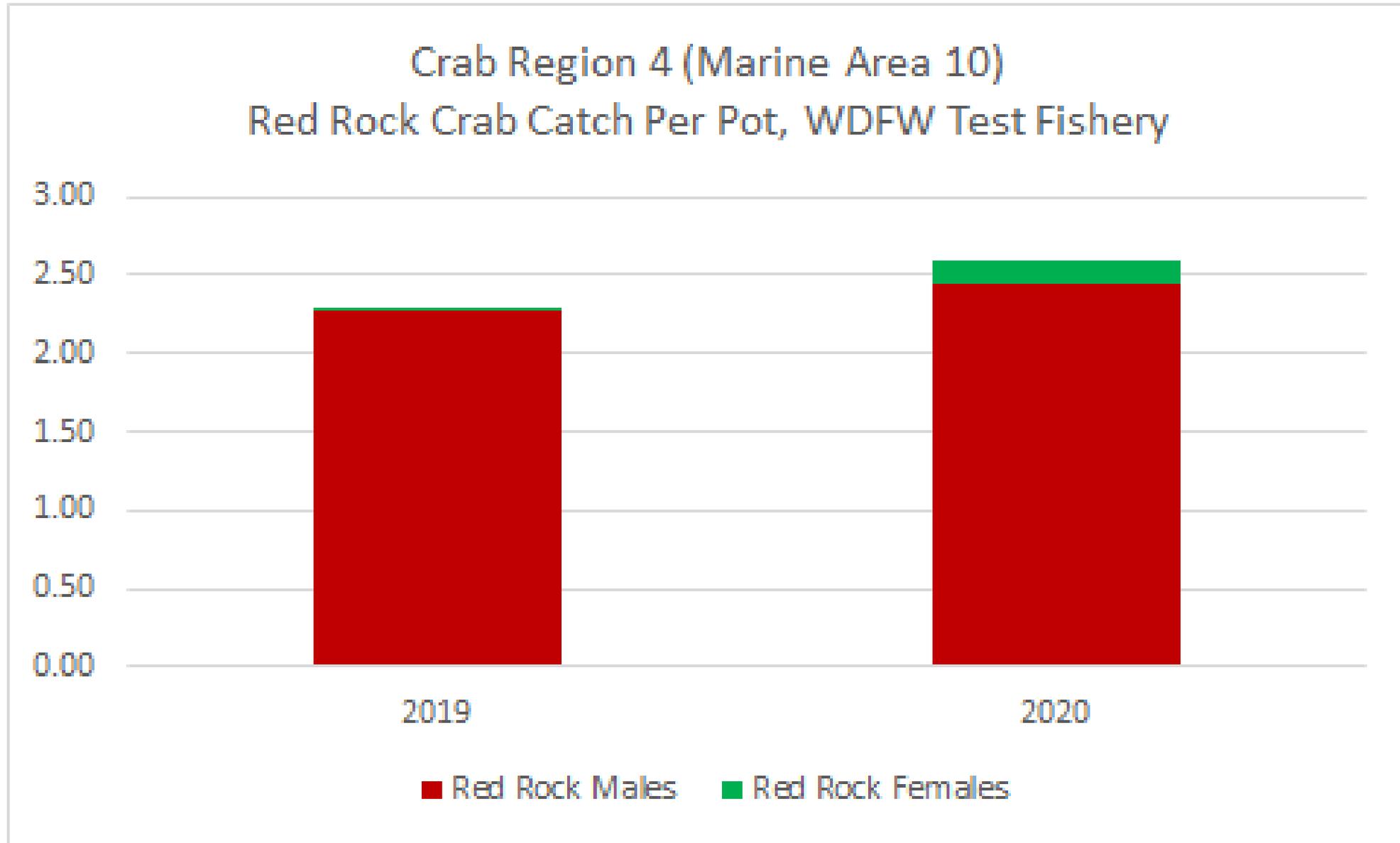
2020 / 2021 Season Overview – Crab Test Fishing



2020 / 2021 Season Overview – Crab Test Fishing



2020 / 2021 Season Overview – Crab Test Fishing



2020 / 2021 Season Overview – Crab

- South Sound Conservation Closure Status
 - MA 11
 - Test fishery complete (Puyallup)
 - Improvement in CPUE of legal male Dungeness
 - MA 13
 - Test fishery complete (WDFW)
 - Minimal improvement in CPUE of legal male Dungeness
 - Dungeness concentrated at 1 of 9 sampled sites – Nisqually
 - No indication that Tribes want to resume Dungeness harvest

2020 / 2021 Season Overview – Crab

- South Sound Alternative Fishing Opportunity Scenario 1
 - Red Rock crab only recreational fishery
 - *Rules:*
 - Same gear specification as currently in place for Dungeness
 - Depth restriction
 - *Rationales:*
 - Provide opportunity for crabbing in areas where none currently exist.
 - Mitigate Dungeness interaction to conserve population
 - Possibly reduce any competitive interactions between the two species.
 - *Concerns:*
 - Bycatch and incidental mortality of Dungeness crab that are currently under conservation protection.
 - Enforcement capacity and enforceability.

2020 / 2021 Season Overview – Crab

- South Sound Alternative Fishing Opportunity Scenario 2
 - Red Rock crab only recreational fishery
 - *Rules:*
 - Crab rings only
 - Depth restriction
 - *Rationales:*
 - Provide opportunity for crabbing in areas where none currently exist.
 - Rings require more active fishing and may mitigate incidental mortality stemming from behavioral interactions between crab.
 - Possibly reduce any competitive interactions between the two species.
 - *Concerns:*
 - Rings catch smaller crab and focusing on this may result in more interaction with younger crab than would occur with a pot fishery.
 - Enforcement capacity and enforceability.

2020 / 2021 Season Overview – Crab

- South Sound Alternative Fishing Opportunity Scenario 3
 - Red Rock crab only recreational fishery
 - *Rules:*
 - No pots or rings.
 - Dive, snorkel, hand-tool (raking), collection by hand only.
 - *De facto* depth restriction < 100ft.
 - *Rationales:*
 - Provide opportunity for crabbing in areas where none currently exist.
 - Eliminates incidental bycatch and handling mortality.
 - Possibly reduce any competitive interactions between the two species.
 - *Concerns:*
 - Enforcement capacity and enforceability.



Crab Pot Escapement Study

November 2, 2015



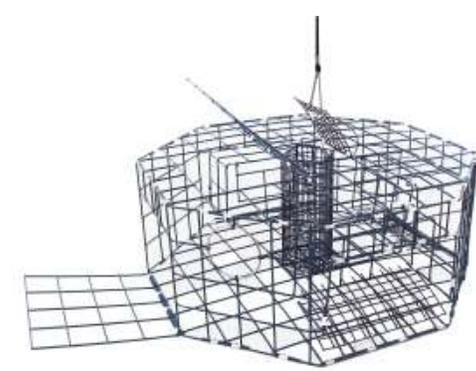
partners in marine conservation



Derelict Gear – Pot Types

Six recreational pot styles covering breadth of what is commonly used in Puget Sound

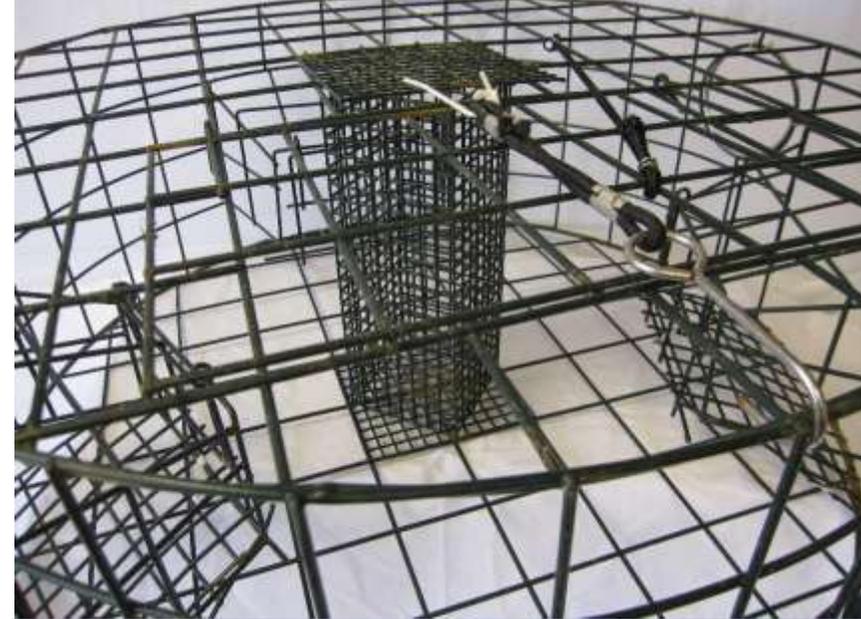
- **Danielson**: square collapsible with ring-fall escape
- **Danielson**: octagonal with ramped entry and sidewall door escape
- **SMI**: round with ramped entry and topside door escape
- **Commercial Style Sport**: round with ramped entry and topside lid escape
- **Danielson**: octagonal with topside door escape, without ramps
- **SMI**: round with topside door escape, without ramps



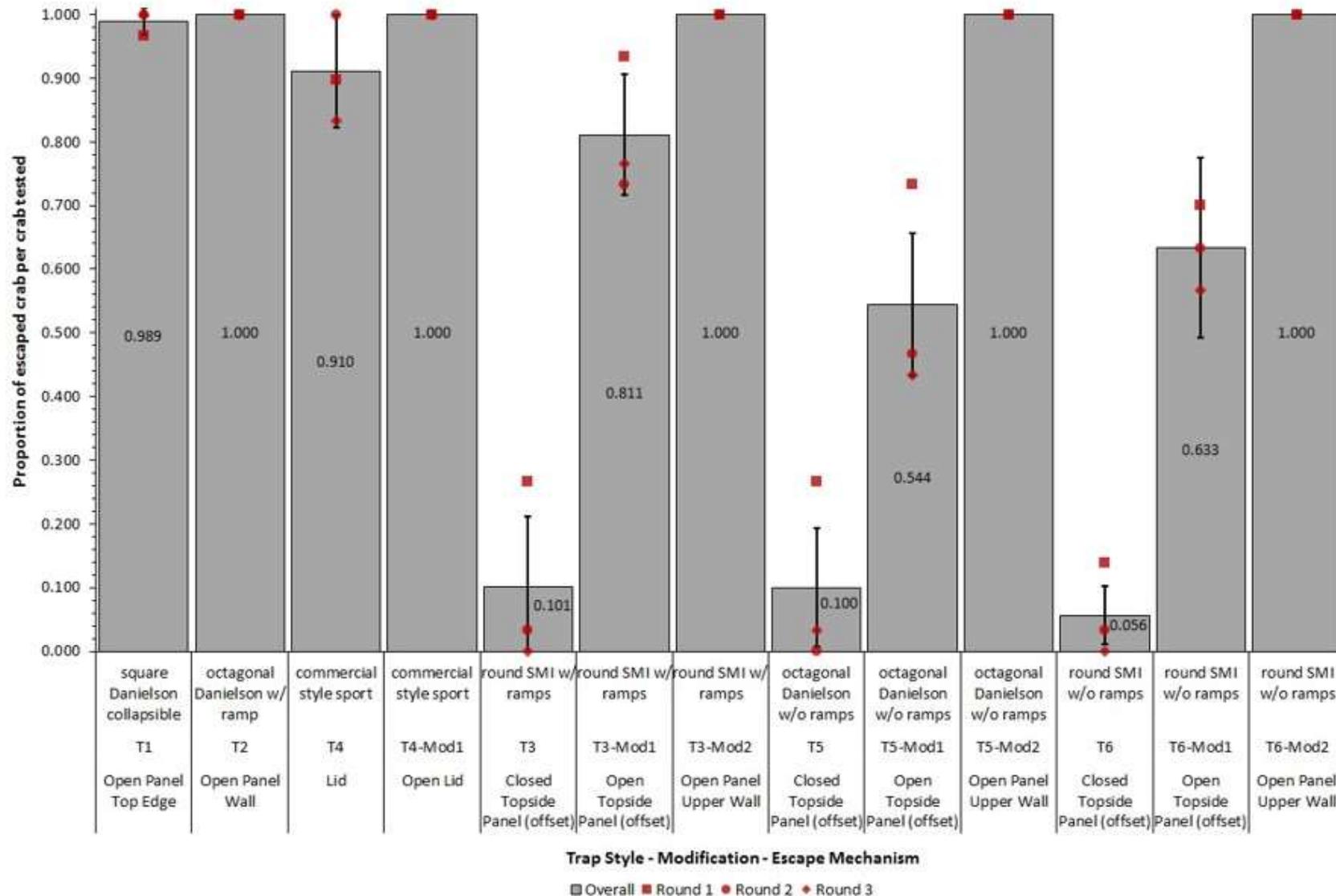
Derelict Gear – Pot Modifications

Modification #1: Spring-loaded topside access door with bungee (shock) cord. Tested on:

- **SMI:** round with ramped entry and topside door escape
- **Commercial Style Sport:** round with ramped entry and topside lid escape
- **Danielson:** octagonal with topside door escape, without ramps
- **SMI:** round with topside door escape, without ramps



Derelict Gear – Northwest Straits Found



Derelict Gear - Northwest Straits Found

	126 day rot cord (120 ct)				60 day rot cord		
	Recreational	Commercial	Total		Recreational	Commercial	Total
PotLoss	12,043	2,192	14,235	PotLoss	12,043	2,192	14,235
LegalCrabLoss	135,138	43,777	178,915	LegalCrabLoss	78,497	29,423	107,920
lbs	256,780	83,176	339,956	lbs	149,145	55,904	205,049
ExVesselValue	\$903,867	\$292,779	\$1,196,646	ExVesselValue	\$524,991	\$196,782	\$721,773

	Savings		
	Recreational	Commercial	Total
LegalCrabLoss	56,641	14,354	70,995
lbs	107,635	27,272	134,907
ExVesselValue	\$378,876	\$95,997	\$474,873

*Based on 2016 estimates for pot loss and ex-vessel value. Updated report with current estimates is in progress.

See Rule Change Drafts

2019 / 2020 Season Overview – Rec Shrimp

Marine Area	Dates	Days per week	Hours each day	Total Days	Total Harvest
MA 4 E of Bonilla-Tatoosh	5/11 - 9/15	7	DL	128	500
MA 5	5/11 - 9/15	7	DL	128	800
MA 6 Disco SD	5/11, 5/15, 5/29, 6/1	NA	8	4	1,944
MA 6 Remainder	5/11-7/14 then 7/15-9/15 daily	4, then 7	DL	101	17,687
MA 7 West	5/11-8/11	4	DL	54	32,451
MA 7 South	5/11-5/12,5/16-5/19,5/23-5/24,6/26-6/27	NA	DL	10	14,732
MA 7 East	5/11-5/12,5/16-5/19,5/23-5/26,5/30-6/2,6/26-6/27	NA	DL	16	4,935
MA 8-1,MA 8-2	5/11, 5/15	NA	6	2	27,954
MA 9	5/11, 5/15	NA	4	2	6,844
MA 10 (Bainbridge)	5/11	NA	4	1	5,157
MA 10 (Elliot Bay)	5/11	NA	6	1	5,451
MA 11	5/11	NA	6	1	2,549
MA 12 (Hood Canal)	5/11,5/15,5/29,6/1,6/21,6/22,7/23,7/24	NA	4	8	90,812
MA 13	None	NA	None	0	0

Recreational sector took 68.7% of 2019 State harvest (Policy target 70%).

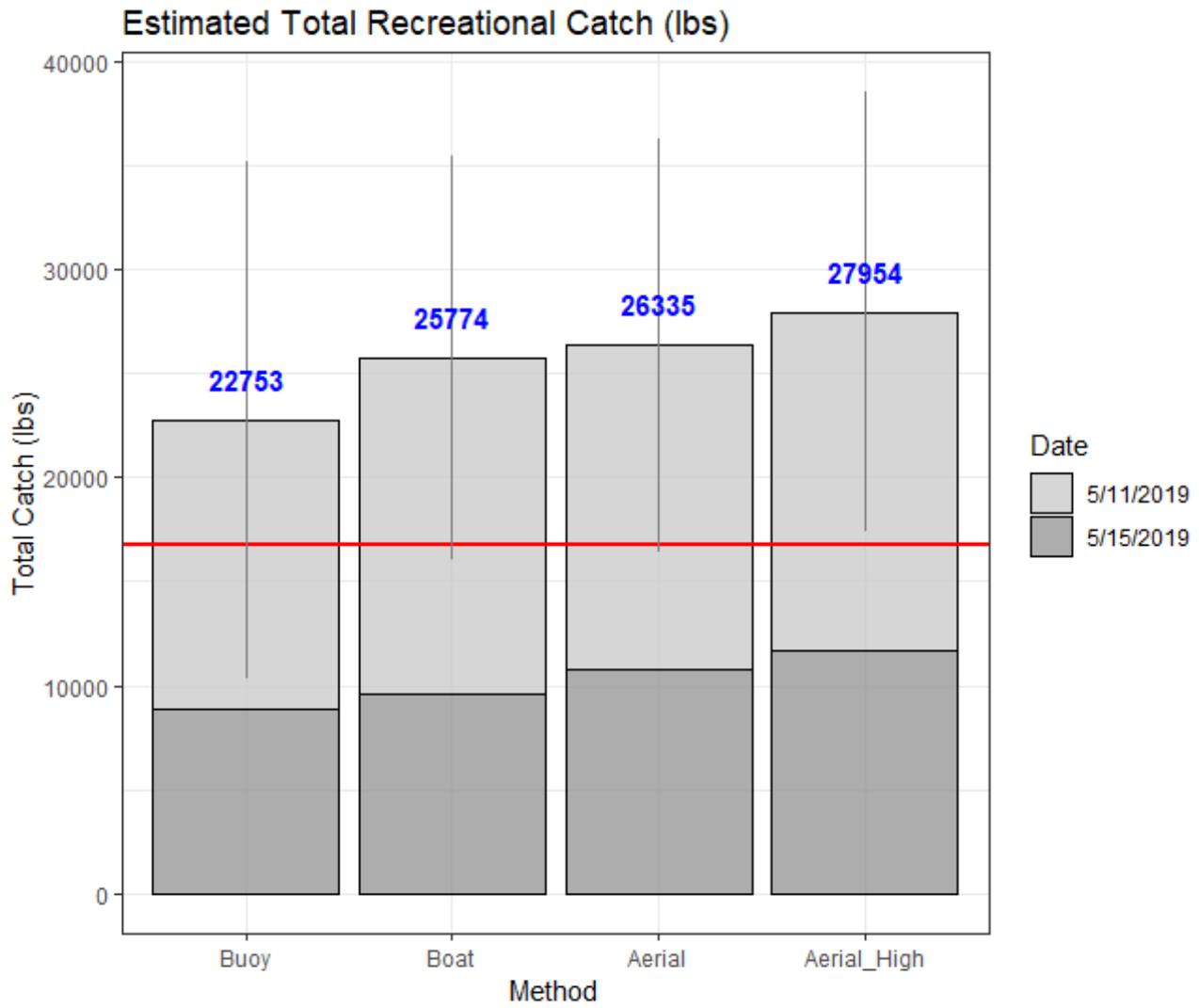
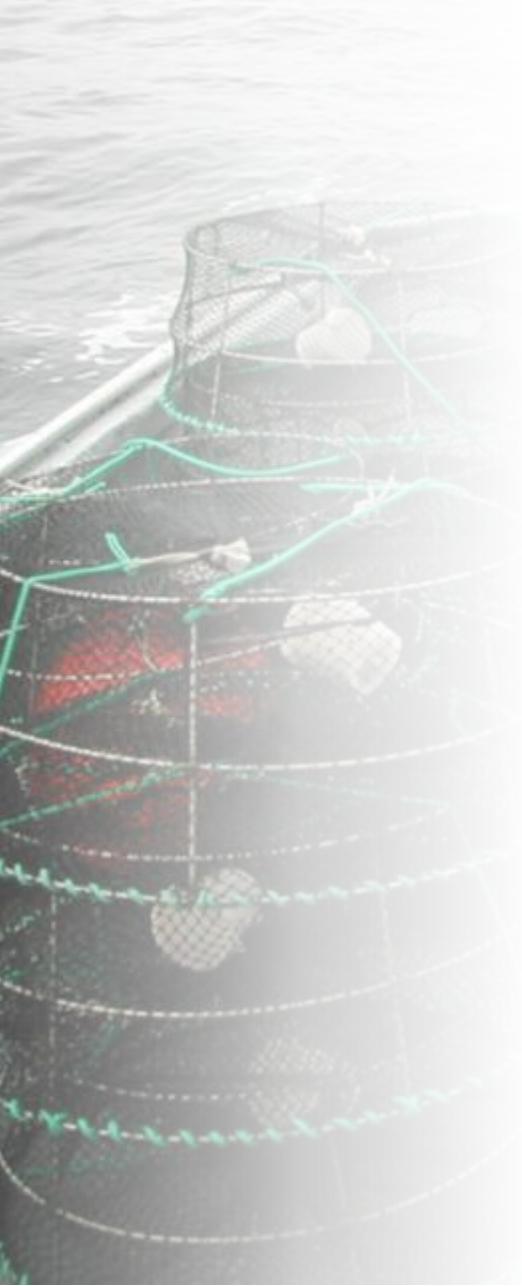
2019 / 2020 Season Overview – Shrimp

- Recreational: Reference handout with State recreational, State commercial, and Tribal totals to date. Includes EUC.

Management, Methods & Enforcement – Shrimp

- Recreational
 - Harvest Estimate Methods
 - 2019/2020 Methods – Methods comparison
 - 2020/2021 Methods
 - More

2019 Method Comparison Experiment



Management, Methods & Enforcement – Shrimp

- Recreational
 - Harvest Estimate Methods
 - 2019/2020 Methods – Methods comparison
 - 2020/2021 Methods
 - More aerial surveys
 - Method comparison in Marine Area 10

Management, Methods & Enforcement – Shrimp

- Season Setting
- Advisor Group Recreational Season Setting Framework
 - What factors are important for setting recreational shrimp dates?

2020 / 2021 Season Overview – Shrimp

- Test Fishery Dates
 - MA 7 West on March 17-18
 - MA 8/9/10 on March 24-26
 - MA 11/13 on March 31-April 1
 - MA 12 on April 8-16
 - Discovery Bay on April 20-21

2020 / 2021 Season Overview – Shrimp

Marine Area	Preliminary 2020 State Share	2019 Overage	2020 Adjusted State Share
MA 4 E of Bonilla-Tatoosh	1,000	0	1,000
MA 5	2,000	0	2,000
MA 6 Disco SD	2,000	873	1,127
MA 6 Remainder	83,500	0	83,500
MA 7 West	40,000	863	39,137
MA 7 South	37,000	0	37,000
MA 7 East	7,000	348	6,652
MA 8-1,MA 8-2	23,000	11,186	11,814
MA 9	7,500	0	7,500
MA 10 (Bainbridge)	5,500	0	5,500
MA 10 (Elliot Bay)	5,500	0	5,500
MA 11	5,000	0	5,000
MA 12 (Hood Canal)	95,000	0	95,000
MA 13	0	0	0

2020 / 2021 Season Overview – Shrimp

- Recreational Shrimp Dates

MA	Region(s)	Dates	Days
4	3	May 3 - Sept 15	7 days/week
5	3	May 3 - Sept 15	7 days/week
6, DB*	3	May 3, 6, 13	Sun, Wed, Wed
6, No DB*	3	May 3, 13,14,15,16,28,29,30	Sun, Wed - Sat, Thurs – Sat
7 South	3	May 3, 13,14,15,16,28,29,30	Sun, Wed - Sat, Thurs – Sat
7 East	1	May 3, 13,14,15,16,28,29,30	Sun, Wed - Sat, Thurs – Sat
7 West	1	May 3, 13,14,15,16,28,29,30; June 1 - Sept 15 (or until quota reached)	Sun, Wed – Sat; 4 days/week
8-1/8-2	2E	May 16	Sat Only
9	2W	May 16	Sat Only
10	4	May 16	Sat Only
11	6	May 16	Sat Only
12	5	May 3, 6, 16, 20, 30	Sun, Wed, Sat, Wed, Sat

Other Items

- Fish & Wildlife Commission
 - Tribal Date Flexibility Request

Tribal initiatives that would require policy revision

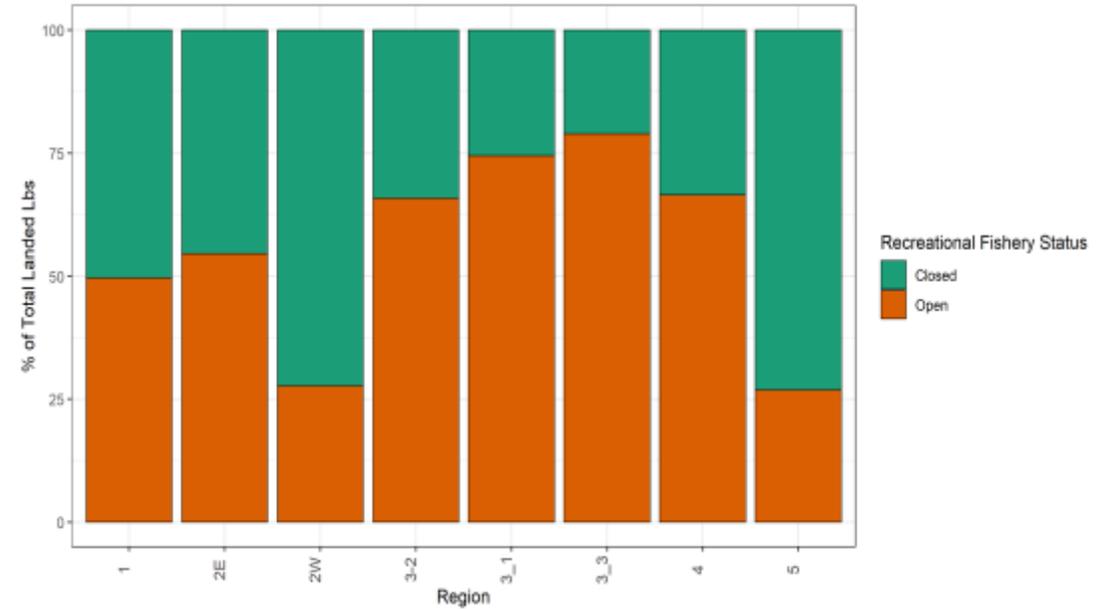
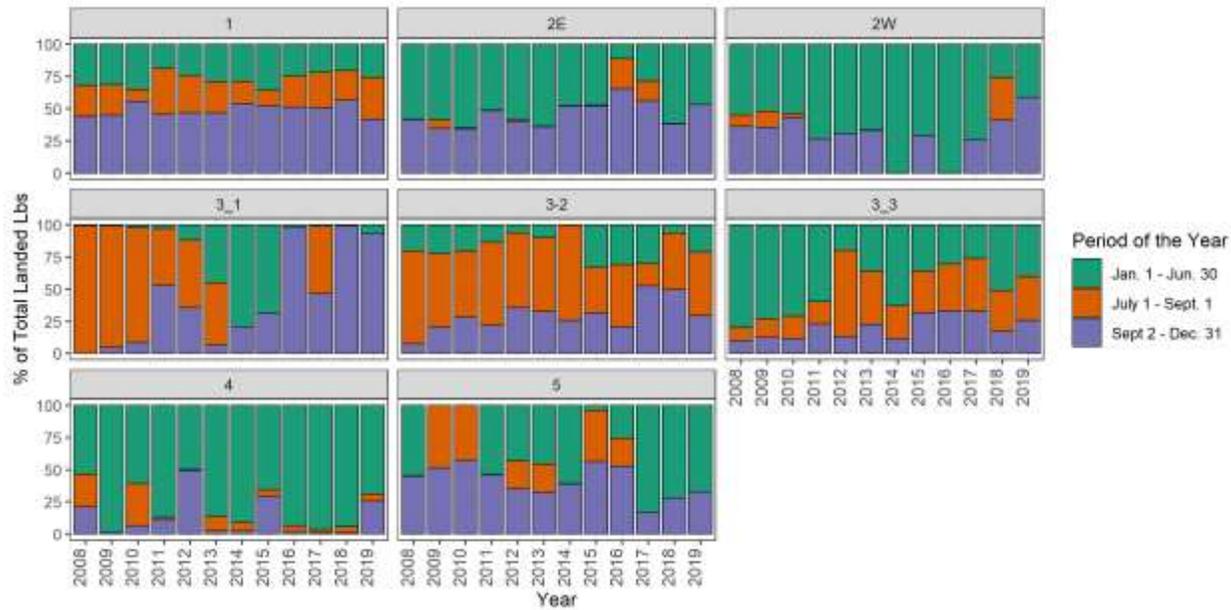
1. Change Crab Policy to allow 1-week closure periods, rotated between crab management regions, to allow for longer windows for exclusive tribal crab openings during the summer.
1. Provide flexibility in Crab Policy for WDFW managers to change fishing schedules in-season.
1. In areas with high recreational catch, change Crab Policy to allow crabbing for 4 days per week to limit recreational catch and provide 3 exclusive harvest days for tribes.
1. Change Crab Policy to allow commercial clean-up fisheries following recreational harvest in all Crab Regions. This would provide more flexibility to increase quotas at the end of the recreational season, if abundance supports an increase.

Tribal initiatives that would not require policy revision

1. Coordinate with tribes annually in order to discuss and identify crab (and shrimp) recreational fisheries open and close dates.
1. Require two recreational reporting periods during the summer recreational fishery; one mid-season and one at the end of the summer season. The addition of the mid-season catch reporting would help both the state and the tribes with adjusting schedules and strengthening seasonal harvest expectations.
2. Expand creel surveys and collect crab weight measurements to improve recreational catch estimates.

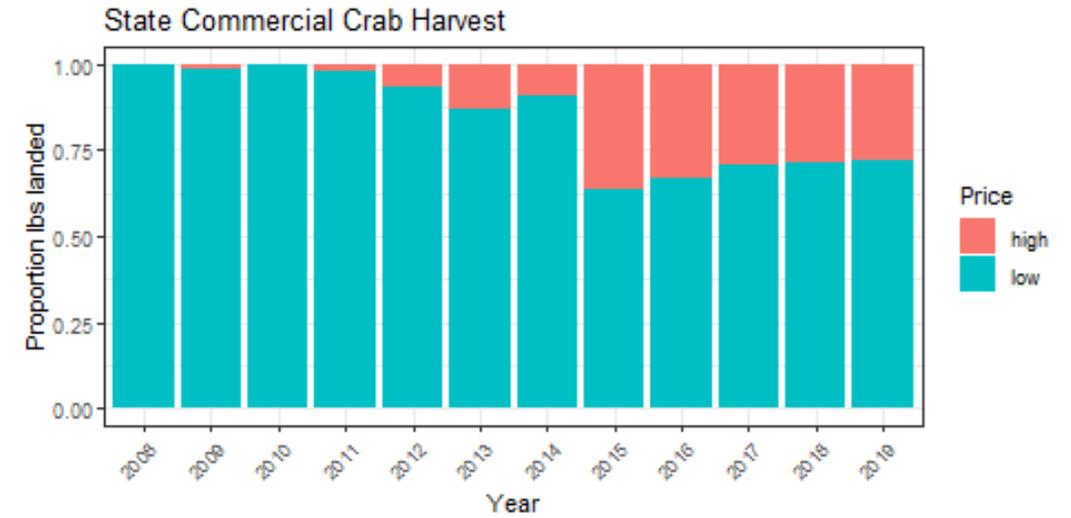
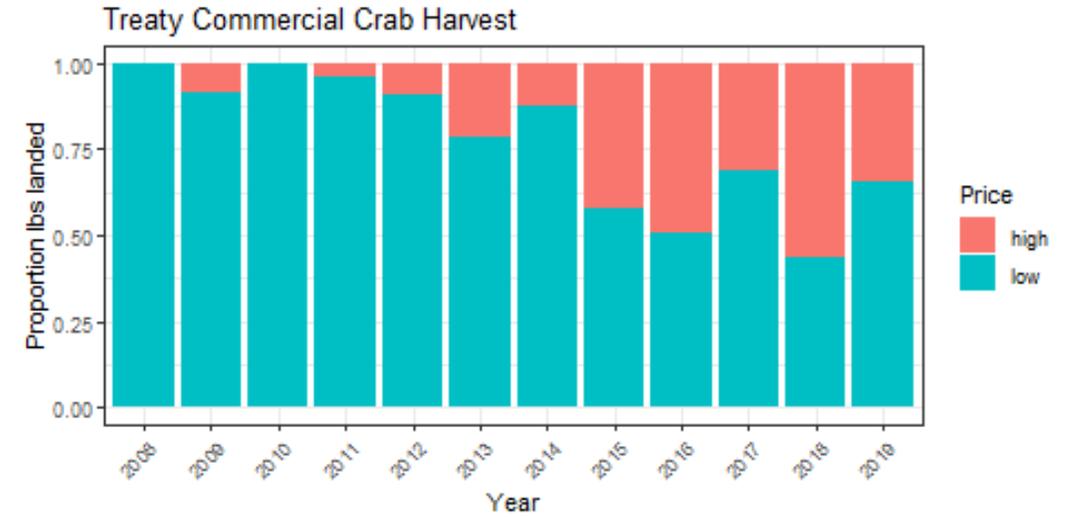
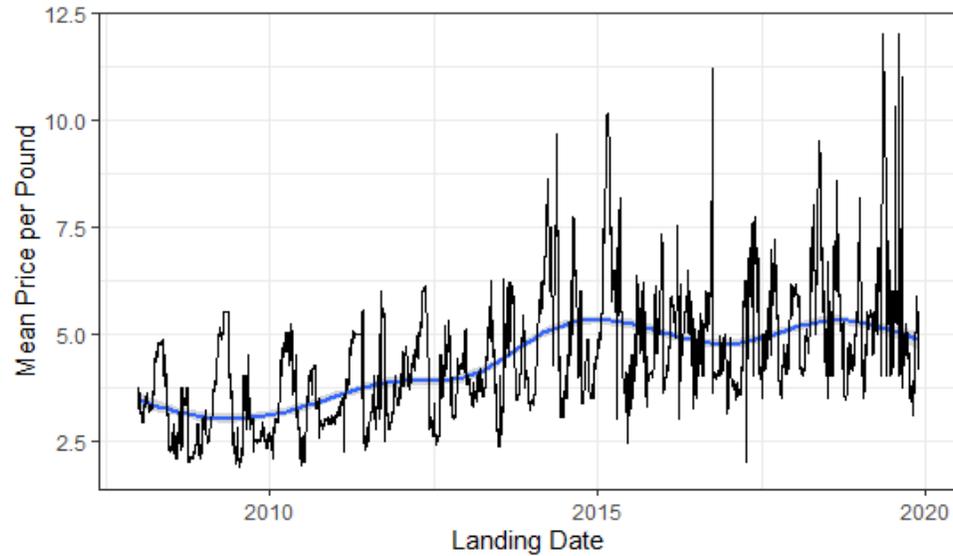
Other Items

- Fish & Wildlife Commission
 - Tribal Date Flexibility Request



Other Items

- Fish & Wildlife Commission
 - Tribal Date Flexibility Request



Website – Advisory Committee Page

- What information to include?
 - Historical harvest data and/or test fishery data
 - Past meeting information – meeting minutes
 - Annual reports made to the Commission and Legislature
 - Other items?

Website – Species Pages

- Prioritize classified species first (potentially harvestable)
- Add the invasives and common unclassified species next
- Information to include:
 - Photos for identification
 - Life history information
 - Habitat within State waters
 - Classified species vs unclassified species (unclassified are not harvestable)
 - Other?

Website – Season Information

- Crab
 - Public and WDFW customer service tend to like tabular view and format
- Shrimp
 - Will likely format this like the crab seasons page for the upcoming year

Website – Commercial Information

- Crab
 - This page already exists and regularly visited by the commercial fleet.
 - Do recreational advisors and the general public use the information here?
- Shrimp
 - Page to be developed.
 - Would advisors and general public use the information?

Website – Data Explorer

- Crab
- Shrimp

Website – Recreational User Engagement

- What other ways can we engage and educate recreational users?

Wrap-up & Take Aways

- What other ways can we engage and educate recreational users?