

Learn More



Washington Department of FISH & WILDLIFE

# Washington Pink Shrimp Fishery Newsletter 2023

Inside you will find information about the 2022 commercial pink shrimp fishery season, historical trends, and news about the upcoming 2023 season.

Learn more at [wdfw.wa.gov/fishing](http://wdfw.wa.gov/fishing)

## Welcome to the latest WDFW Pink Shrimp Newsletter !



**24.5 M**  
pounds of shrimp  
landed



**Increased**  
productivity  
in 2022



Washington's 2022 pink shrimp landings surpassed 2021, continuing the upward trend.



Total season value  
**3rd highest**  
on record at 11.6 M

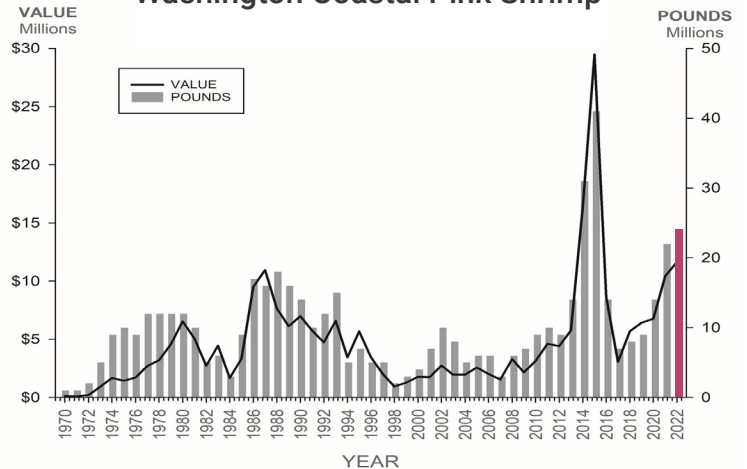


**Highest**  
CPUE  
since 2014


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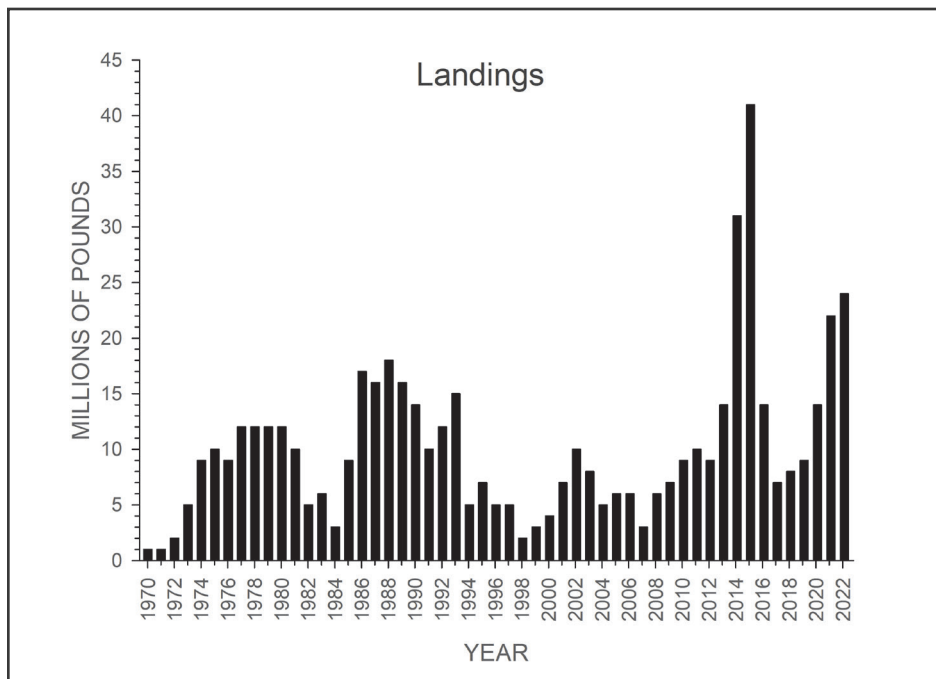
### Washington Coastal Pink Shrimp



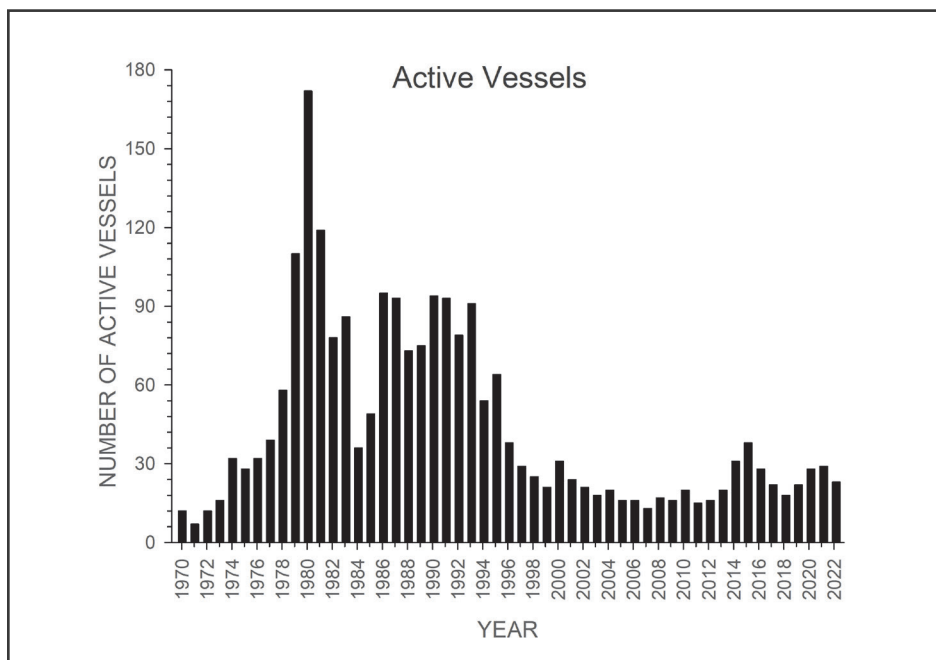
# 2022 Season Summary

 With the exception of the unusually high landings that occurred in 2014 and 2015, the landings made in 2022 were the 3rd highest on record (Figure 1).

The number of vessels making landings decreased from 29 to 23 (Figure 2) which is similar to participation in the 2017-2019 fisheries. Since the Washington Pink Shrimp Trawl fishery is managed under a limited entry program, any license that is not renewed annually is returned to the state and not re-issued. From the inception of the limited entry program in 1996 the total number of licenses has declined from 129 to 74 in 2022. Most of the decline occurred by 2004 and since then an additional 13 licenses have sunsetted. One measure of fishing effort is the number of landings. The total number of landings made into Washington ports in 2022 was slightly below 2021 (Figure 3).

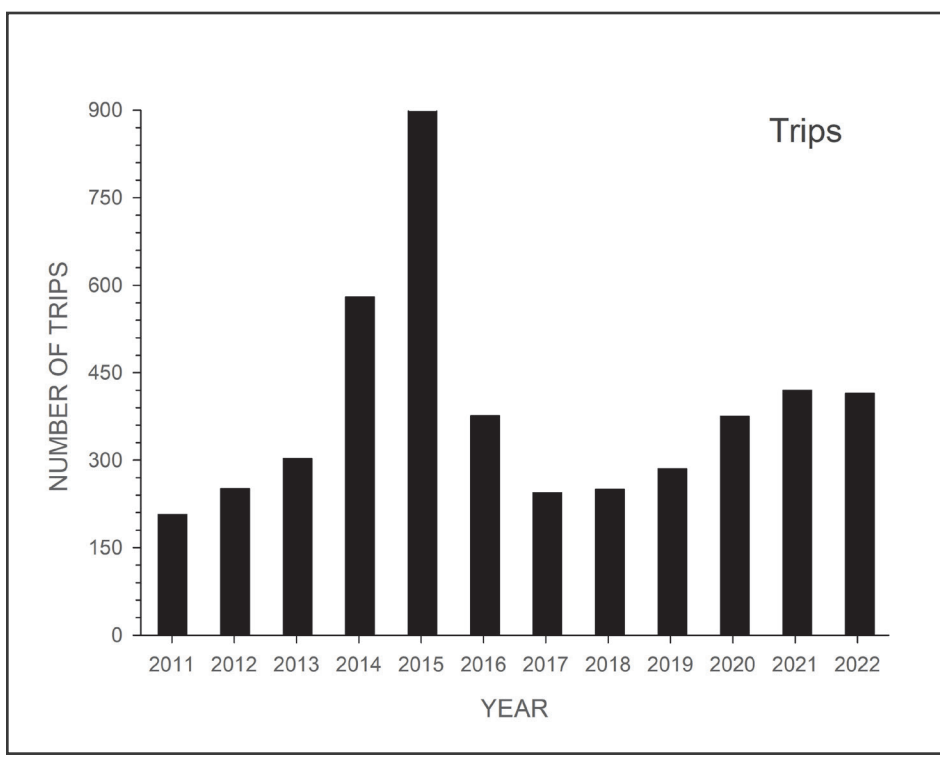


**Figure 1.** Annual landings (millions of pounds) of pink shrimp into Washington, 1990-2022.

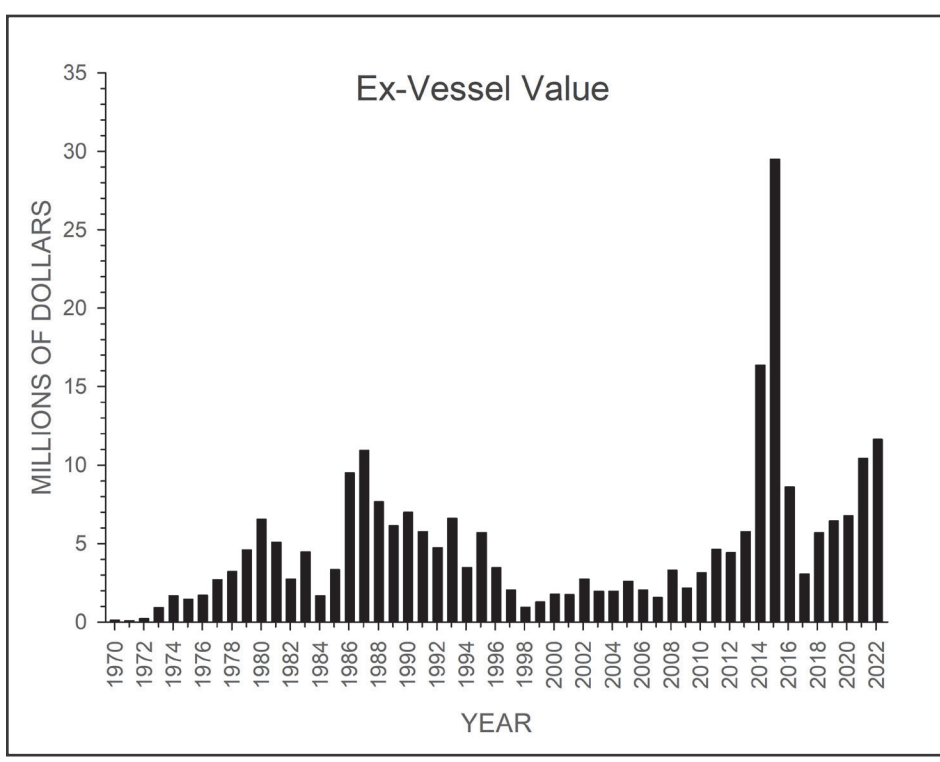


**Figure 2.** Number of vessels actively fishing, 1970-2022.

Total 2022 fishery ex-vessel value (paid to the fisher at the time of landing) was \$11.6 million, an increase of \$1M from 2021 (Figure 4). A larger portion of shrimp landed into Washington in 2022 was also caught in waters off Washington, with just 3% coming from out-of-state waters, the lowest level since 2018. Except for early season landings in April, landings for each month in 2022 were higher than the 10-year average. Landings in June and July were exceptional, both surpassing the previous seasons peak month in August (Figure 6). The average price per pound in 2022 was \$0.48, which is below the 10-year average of \$0.56 (Figure 7).



**Figure 3.** Number of fishing trips, 2011-2022.



**Figure 4.** Ex-vessel value of Washington pink shrimp landings, 1970-2022.

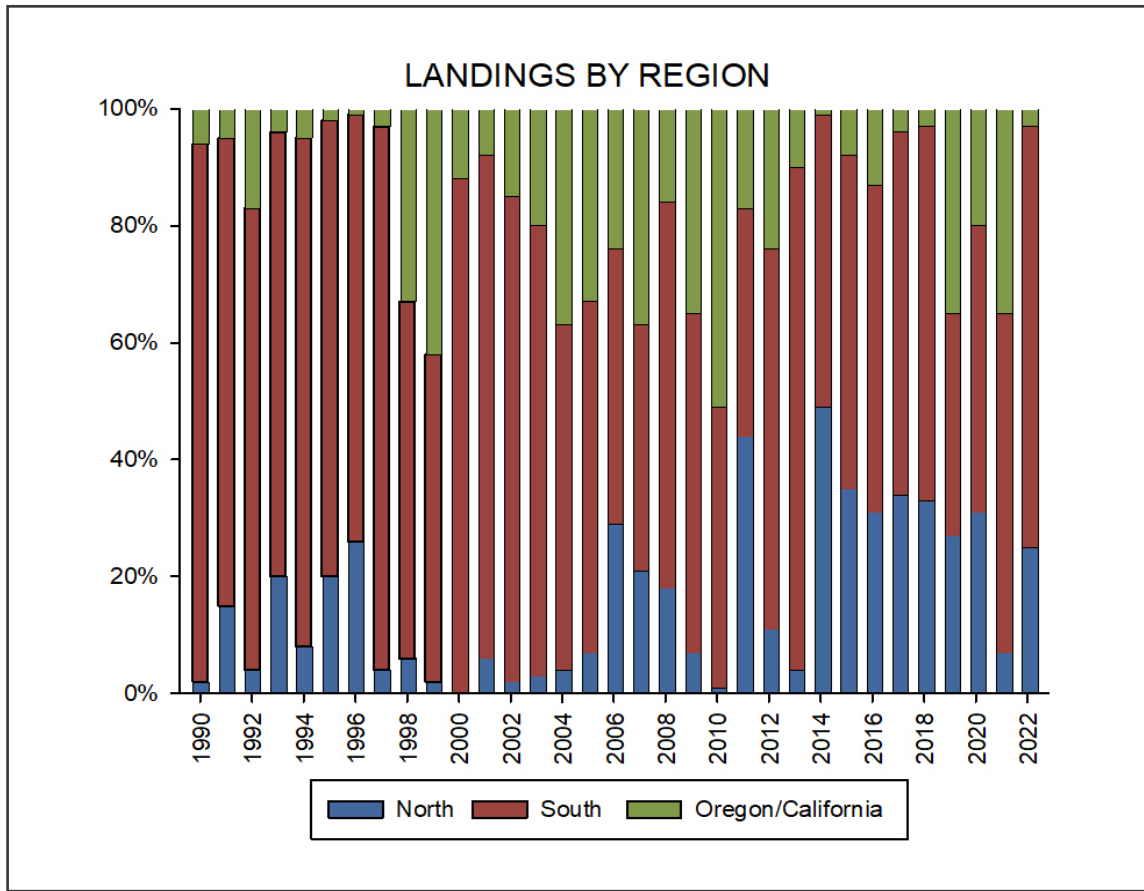


Figure 5. Shrimp fishery landings by region, 1990-2022.

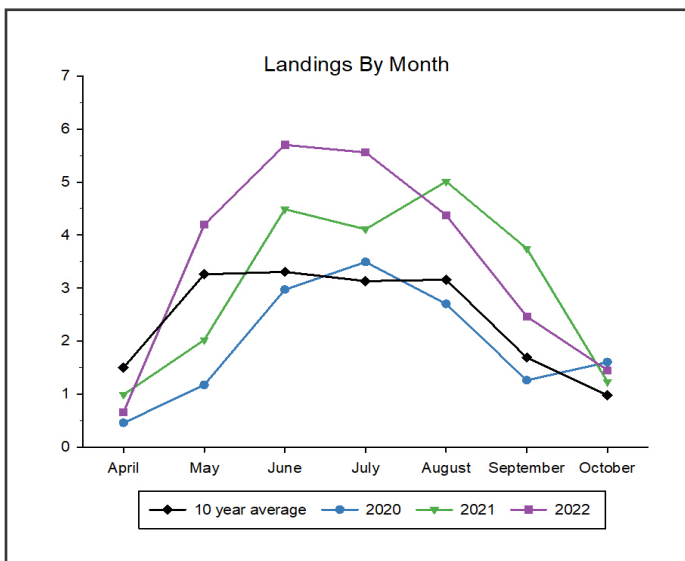


Figure 6. Pink shrimp landings by month for 2020-2022, and the 10-year average.

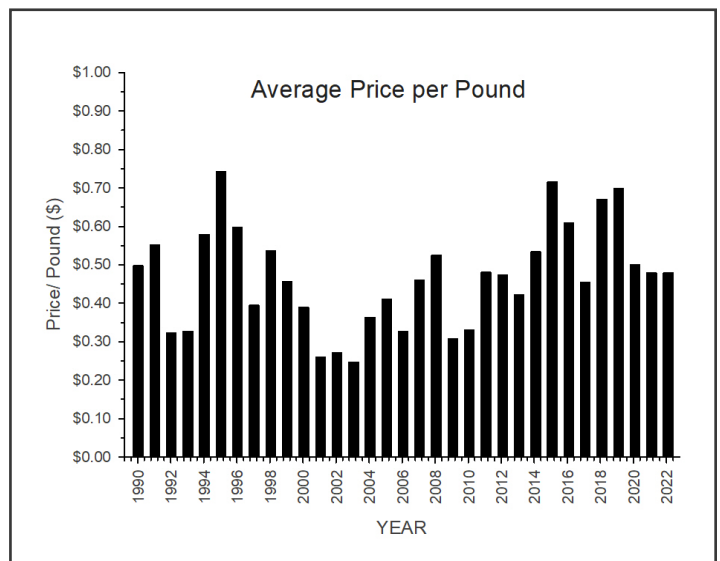


Figure 7. Average price per pound, 1990-2022.

# Fisheries Research and Monitoring

## Effort

Effort is measured by the number of hours fished. In 2022, the number of hours fished decreased slightly from 2021 and 2020 (Figure 8). Here, fishing hours are estimated as “single-rig equivalents,” or SREs. In the past, most vessels towed only one net, i.e., single rig. Now, double rig vessels are most common but to maintain a consistent data set, fishing hours for “double-rig” vessels are multiplied by 1.6.

Overall, shrimpers shifted their fishing effort north earlier in the season in 2022 compared to recent years. Except for a few vessels that fished off Oregon in the spring, shrimping in 2022 centered on the Washington coast (Figure 9). In May and June, effort was split fairly even between Grays Harbor and Destruction Island. In July, Washington shrimpers began shifting their efforts closer to “home” with effort in the Grays Harbor management area, accounting for 59% of the year’s total hours fished.

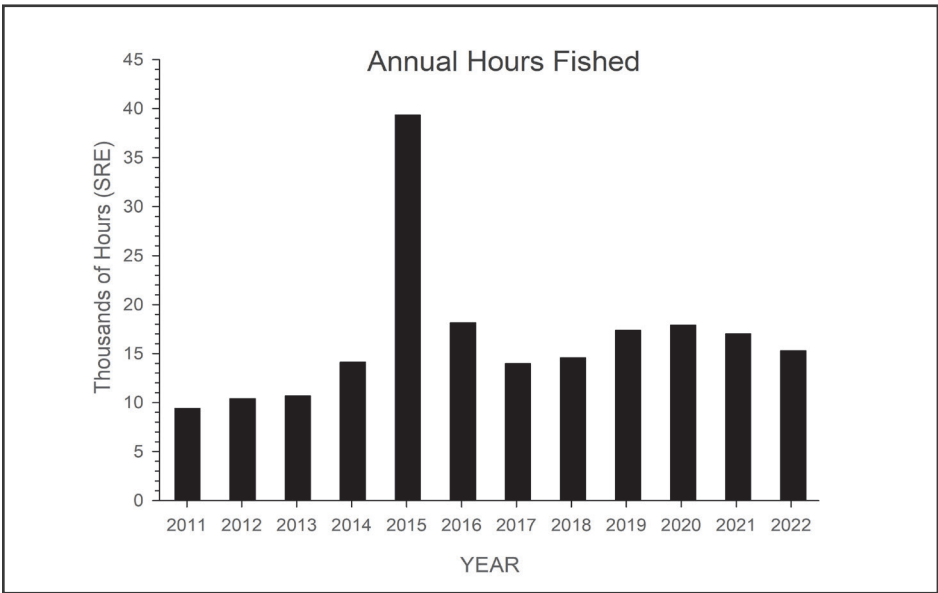


Figure 8. Estimated number of hours fished annually (1000’s), 2011-2021.

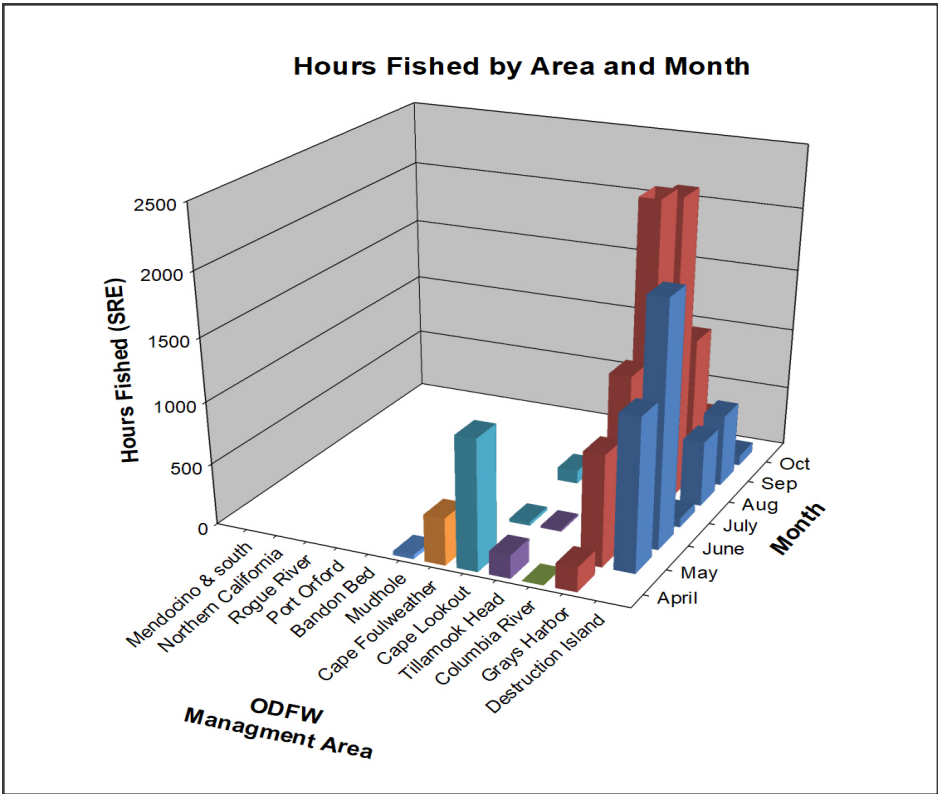


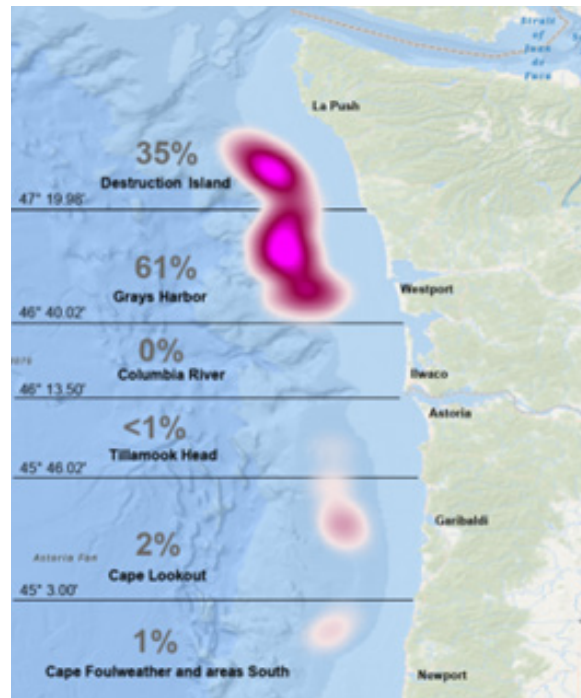
Figure 9. Estimated hours fished by area and month in 2021.

## Catch Distribution

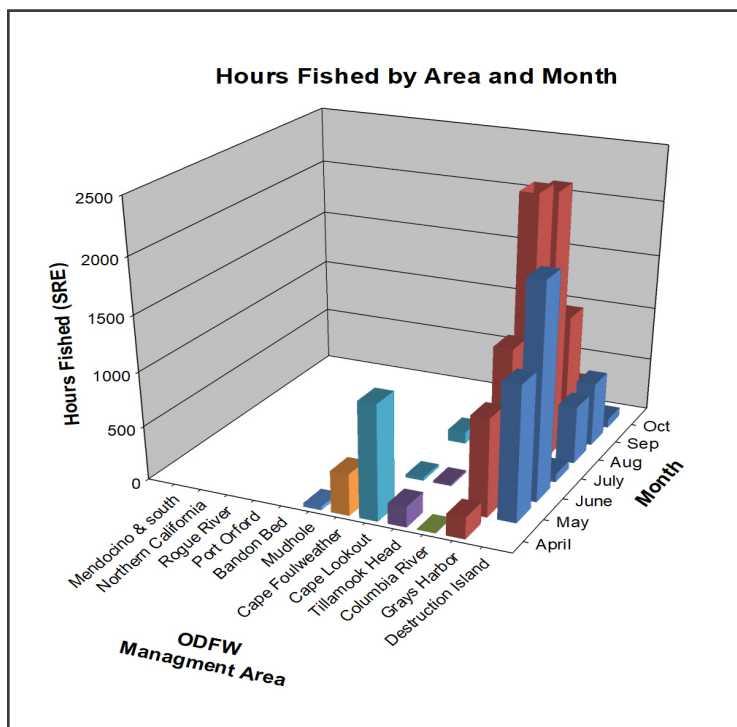
The heat map (Figure 10) shows where the shrimp landed in Washington were caught. The brighter the color pink, the more catch that came from that location. Compared to recent years, overall catch shifted north in 2022.

Destruction Island area catch more than doubled from 15% in 2021 to 35% in 2022. Catch from the Grays Harbor area increased over 2021 only slightly, from 54% to 61%. The volume of landings from Oregon dropped significantly, comprising only 3% of the total annual landings.

Figure 11 shows pounds landed by month and management area. Catches increased in May and remained elevated through August off the Washington coast. A shift from north to south occurred mid-season, with peak landings occurring in the Destruction Island management area in May-June and in July-August in the Grays Harbor management area. In 2022, 97% of the shrimp landed in Washington were caught off Washington, with most of that catch from the Grays Harbor management area.



**Figure 10.** Figure 10. The percentage of 2022 catch by management area and distribution of effort.



**Figure 11.** Estimated pink shrimp pounds landed into Washington by area and month, 2021.

### Annual estimate of shrimp caught off Washington and landed in Oregon

Year	Millions of Pounds
2022	16.8
2021	5.4
2020	6.7
2019	5.1
2018	5.0
2017	2.8

Not all the shrimp caught off Washington are landed into Washington ports. If they hold the appropriate state license, shrimpers can land in either Washington or Oregon.

## Catch Rates

Fishing efficiency, or catch per unit of effort (CPUE), was 1,599 pounds per hour (in single rig equivalents) for the 2022 season (Figure 12), continuing the trend for increasing CPUE since the low of 480 in 2017. This 90% increase from the 2020 CPUE and reflects strong shrimp abundance in 2021 and 2022. After a slow start in April, catch rates significantly increased in May and June. Washington CPUE decreased slightly in July, improved again in August and remained consistent through the fall (Figure 13), with October having the highest CPUEs across all areas.

## Biological Sampling

Our sampling program aims to collect count per pound, length, and sex data following protocols consistent with Oregon Department of Fish and Wildlife (ODFW). WDFW samples landings at Westport and Ilwaco weekly, collecting data from catch that originates offshore Washington and Oregon. Similarly, ODFW samples catch landed at Oregon ports that was caught off Washington. Biological data is exchanged such that each state receives all the data collected for its respective catch areas.

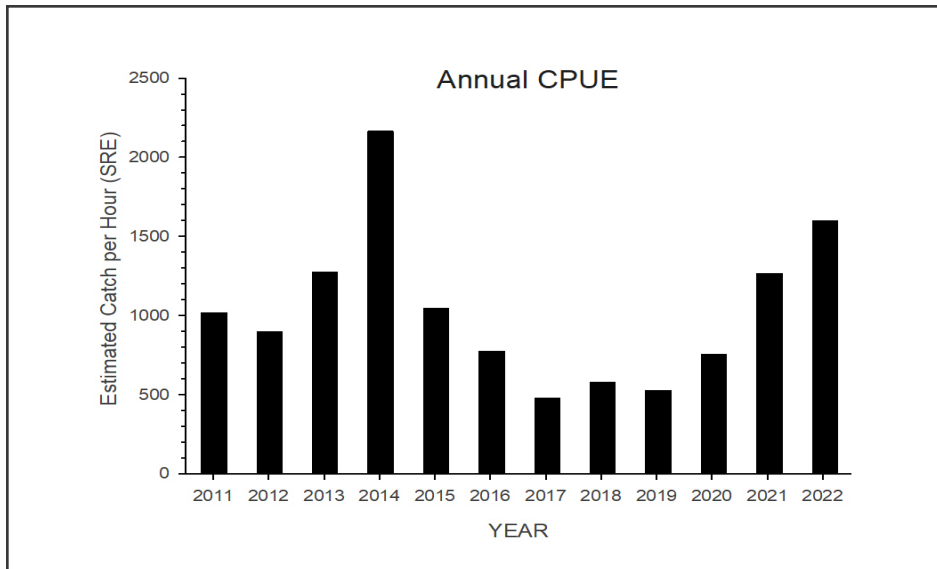


Figure 12. Estimated pounds of catch per SRE hour, 2011-2022.

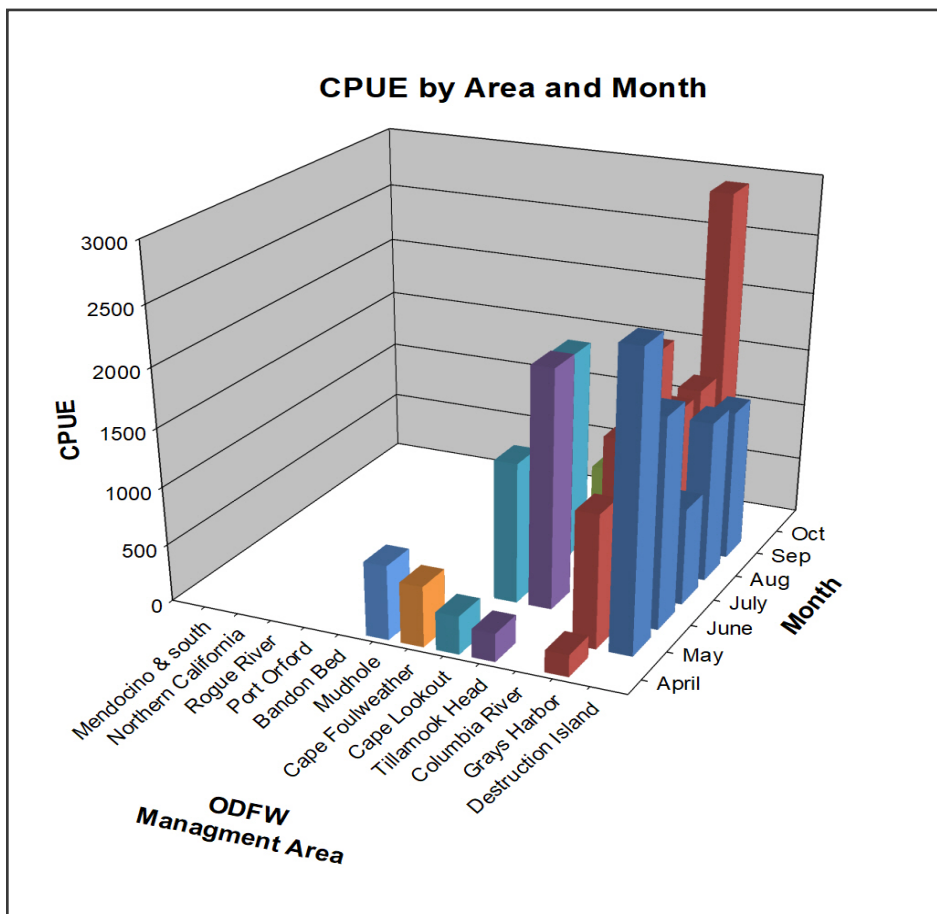



Figure 13. Estimated pounds of shrimp caught per hour (SRE) by area and month, 2022.


WDFW technicians collected 52 samples (approximately 100 shrimp per sample) for length and sex, and count per pound data. Of these, 49 were from Washington catch areas and 3 were from Oregon catch areas. Oregon staff at Astoria collected another 42 samples of Washington caught shrimp.


In total, 91 samples representing shrimp caught off Washington were collected during the 2022 season by WDFW and ODFW staff.

### Count per Pound

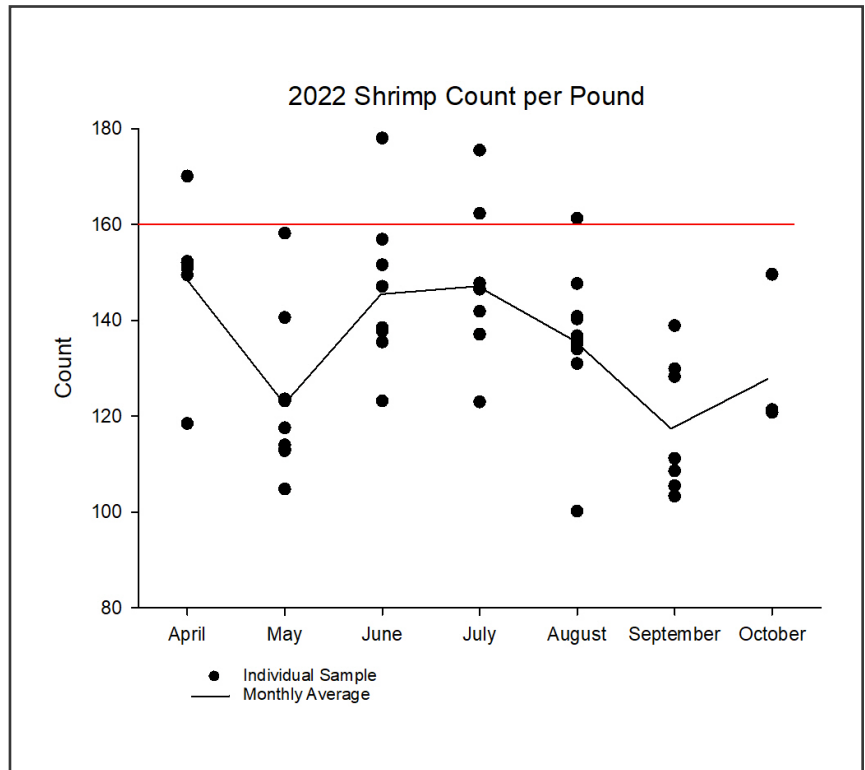
Shrimp size in the fishery is managed by count per pound. The legal maximum is 160 shrimp per pound.

 **Season average for WA catch areas only: 135**

 **Shrimp count per pound fluctuated through the season with the lowest average occurring in September (118) and highest in April (149)**

 **5 samples landed into WA ports in 2022 exceeded the 160-count limit (Figure 14)**

- ▶ Two (2) of the five (5) samples were from July, both were shrimp caught in the Grays Harbor catch area
- ▶ One (1) sample in each of the months of April, June and August exceed the 160-count limit



**Figure 14.** Average count per pound from WDFW samples, 2022. Each point represents a sample of 100 shrimp.

### Shrimp Age Classes

Shrimp lack physical “age” structures or body parts like otoliths (ear-bones) or scales that are typically used to age fish. Instead, the carapace length is measured (see photo). Because shrimp eggs are released at the same general time, shrimp of similar size are assumed to be the same age. By grouping carapace lengths and plotting these data, we can visually characterize the age classes present in the fishery.

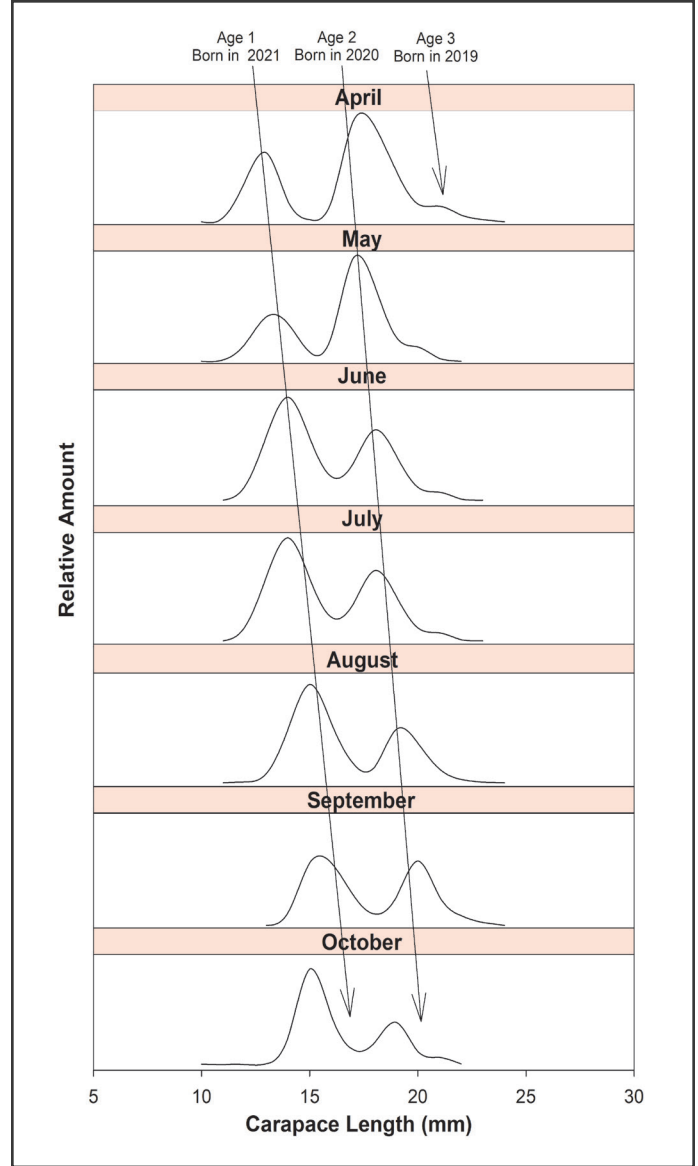
In Figure 15, each month of the season is shown in a separate panel, April through October. This figure includes only shrimp caught off Washington. The line in each panel represents the relative amount that each age contributed to the catch for that month.

In 2022, we see three age classes of shrimp represented in the fishery. The oldest shrimp, age 3, were born in 2019 and the youngest, age 1, were born in 2021. Early catch was comprised primarily of age 2 shrimp; otherwise, age 1 shrimp were dominant





throughout the season. The 2020 and 2021 year classes experienced similar “excellent” conditions as larvae, a strong catch of age 1 and age 2 shrimp were consistent with expectations. The last biological sample was collected October 16, 2022. Fishing ceased in Washington on October 22, 2022. As in 2021, in 2022 we did not see indications of primary females – which would be indicated on the plot as a bifurcation (two humps) of the blue line in September and October.



**Figure 15.** Figure 12. Size distribution of pink shrimp, April- October 2022.

## At-sea Fishery Observation and Bycatch

Two decades of research, gear innovation, and regulatory actions have reduced bycatch in the Washington pink shrimp fishery, a priority for 20 years. Driven initially by rockfish and eulachon conservation concerns, over a decade of onboard monitoring data also helps us understand the fishery’s interactions with other living marine

organisms. Species of particular concern include eulachon (*Thaleichthys pacificus*), which are federally listed as a threatened species, Yelloweye rockfish (*Sebastes ruberrimus*), which are under a federal rebuilding plan, and chinook and coho salmon (*Oncorhynchus* spp.).

### The West Coast Groundfish Observer Program

(WCGOP) has been deploying federal observers on Washington licensed shrimp vessels since 2010 to document bycatch. Coverage of the fishery is measured as the proportion of total observed shrimp pounds to total shrimp pounds landed and has averaged 12% since 2011 (Figure 16). The number of vessels, trips, and tows observed each year from 2011 to 2021 are shown in Figure 17, and Tables 1 and 2 include published bycatch data for marine fish and shellfish species<sup>1,2</sup>. Since observation began, estimated bycatch in the Washington fishery has averaged 410 mt (SD 245). As a percentage of total catch (sum of WA fish landing receipts and WCGOP bycatch estimator), bycatch has ranged from 2% to almost 12%, averaging about 6% (Figure 18).

Altogether, observers have documented nearly 185 bycatch species or species groups. The top 20 species ranked by cumulative weight from 2011 to 2021 are presented in Table 1. By this measure, **eulachon** ranked second as the dominant bycatch species and Pacific hake was third. Rounding out the top ten are soles, salps (a pelagic tunicate), smelt species, Pacific herring, and eelpouts. Table 2 lists another 22 species/groups frequently caught but in low volume, including additional species of rockfish, spiny dogfish shark, and northern anchovy. The total combined weight of these for the 2011-2021 period was 61 mt. Otherwise, the remaining approximately 142 species/groups that have been recorded are infrequently caught, i.e., one or two instances, and in low volumes. Included among these are species of particular management interest. In 2015, five (5) pounds of coho and four

(4) pounds of chum salmon were documented in two (2) out of 9,745\* hauls where at least part of the tow was off Washington<sup>3</sup>. No chinook salmon have been observed. Yelloweye rockfish were observed in 2012 (1.3 pounds) and in 2019 (less than one pound).

Care should be taken when evaluating trends in bycatch. Gear underwent significant change during years the fishery has been observed so there is no clear “before” or “after” point in time over which to compare bycatch in the fishery. When observation of Washington licensed vessels began, bycatch reduction devices or excluders were mandatory and the most popular bar spacing on the excluder panels was about 1 ½ in. although rules allowed up to a 2 in. spacing. Regulations reduced the bar spacing to ¾” in 2012 based on research that narrower bar spacing improved exclusion of eulachon. When new research in 2014 demonstrated further reductions in eulachon bycatch could be achieved when footropes were outfitted with LED lights voluntary usage quickly became widespread. Rules requiring their use went into effect in 2018.

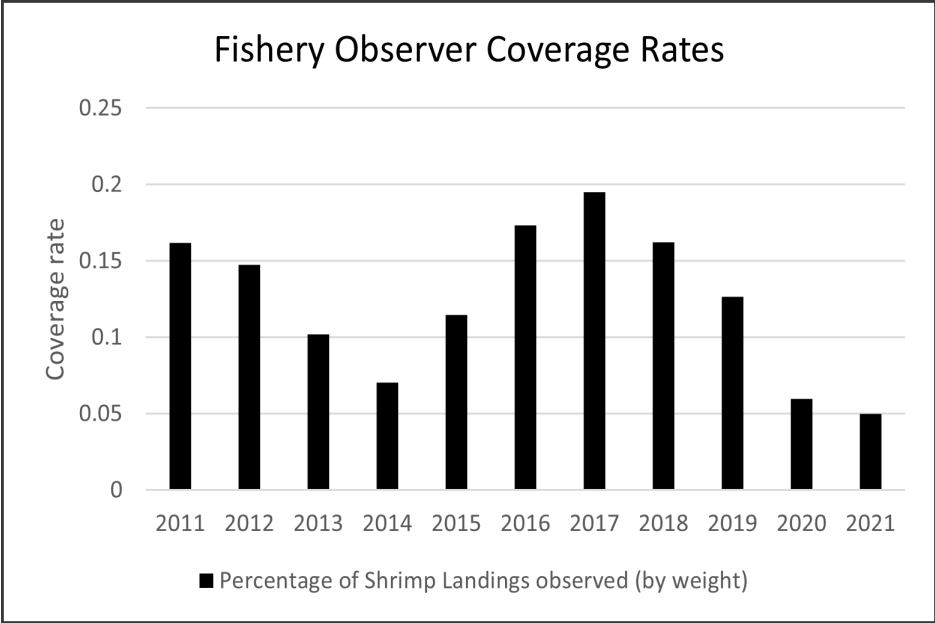
Stock dynamics must also be considered when evaluating bycatch in the fishery. For example, a study looking at the distribution (in space and time) of eulachon and shrimp compared fishery data and NOAA research bottom trawl survey data and found that increases in eulachon bycatch in 2012 could be attributed to increases in eulachon abundance.<sup>4</sup> Similarly, the bycatch of 231 mt of eulachon in 2021 is presumed to reflect a higher abundance of eulachon that year (Matt Sturza, personal communication, November 4, 2022). This trend in

\*The total number of hauls is from any vessel that participated in the shrimp fishery and completed at least a partial tow in Washington, not just vessels licensed in Washington that were observed. Hence this value is greater than the number of observed tows depicted in Figure 17.

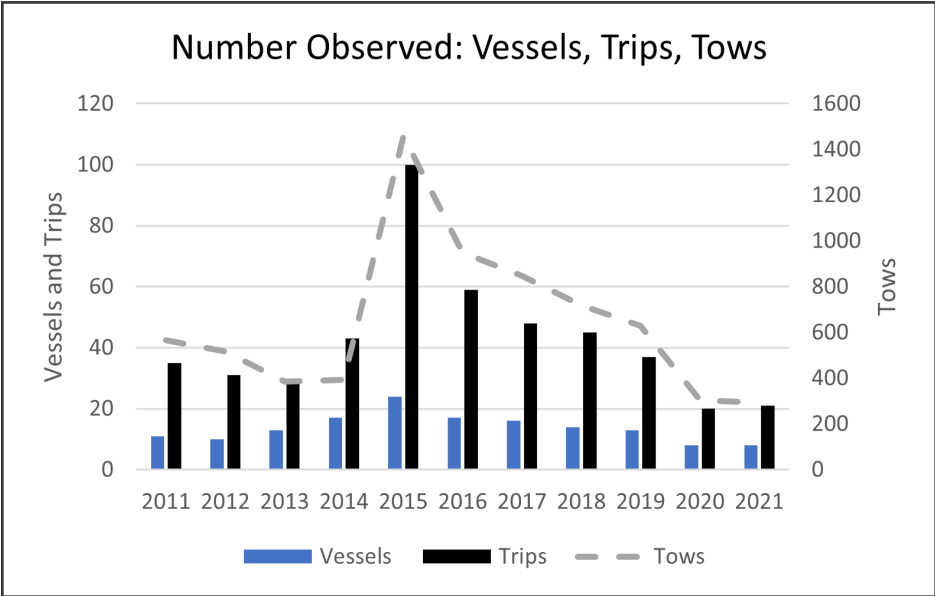
eulachon bycatch has continued since the increase from 32 mt in 2018 to 139 mt in 2019 and is attributed to trends in higher abundance of eulachon.

Historically, eulachon have supported directed commercial and recreational fisheries in the mainstem Columbia River and the Cowlitz River, respectively. Closed most years since eulachon were federally listed (2010), indications of stronger run size have supported some limited directed fishing. In 2014–2018, the states worked closely with NMFS to adopt limited, conservation-minded commercial and recreational eulachon fisheries. No fisheries occurred during 2019, but in 2020-2022 the states again adopted limited commercial and recreational seasons. In 2022, recreational, commercial, and tribal ceremonial and subsistence fisheries harvested an estimated 224,326 pounds of eulachon.

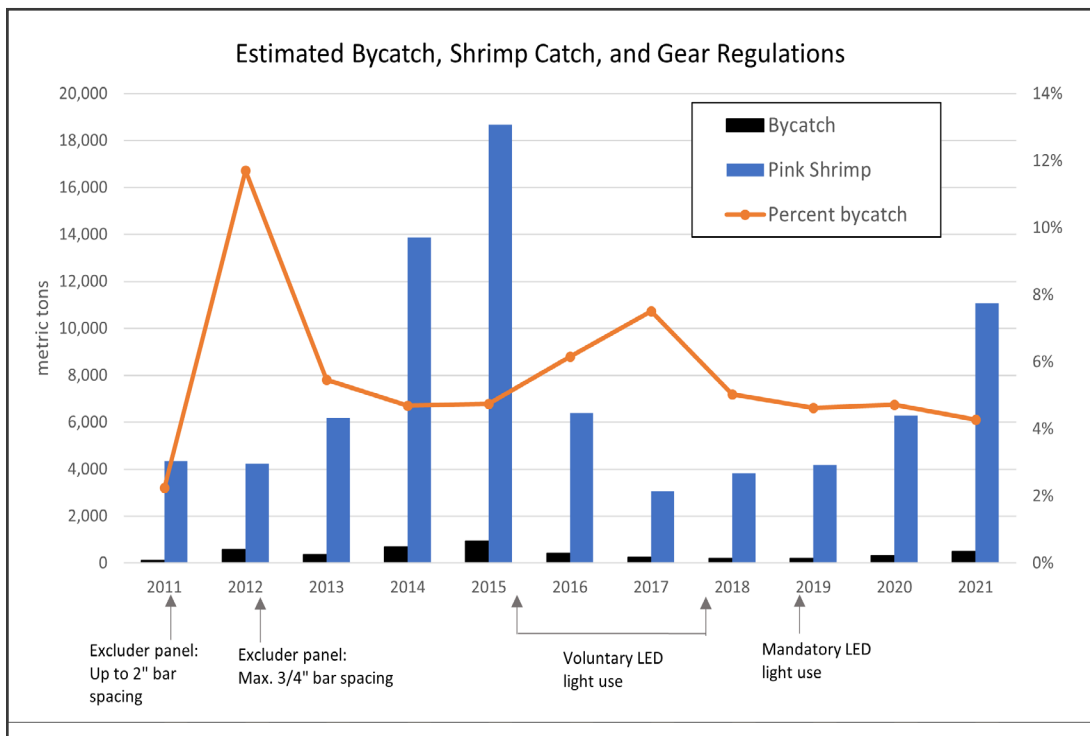
Note, due to the availability of final observer data or reports the information here lags coastal shrimp fishery data by a year.



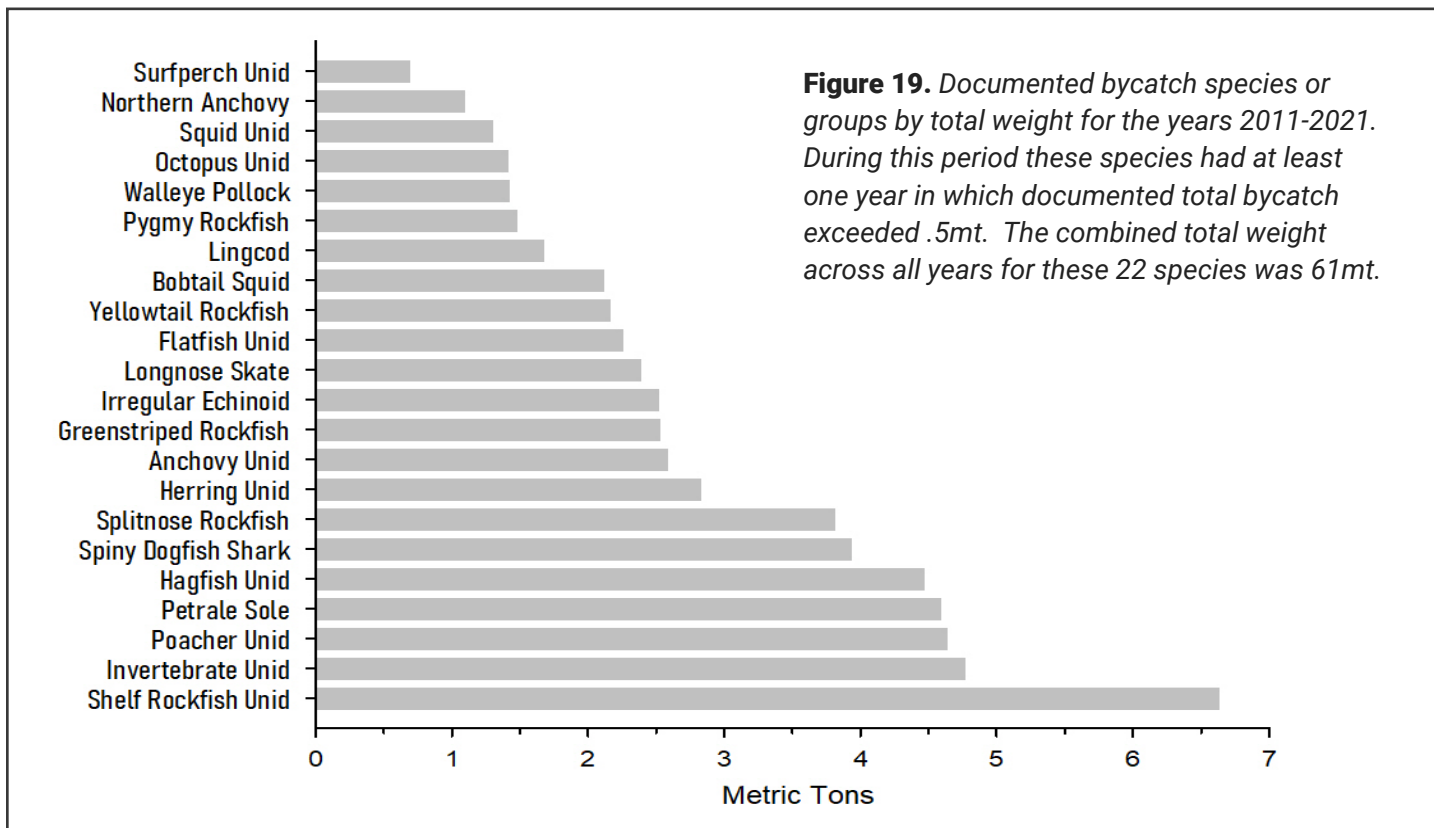
**Figure 16.** Federal observer coverage rate of Washington vessels, in terms of pounds of shrimp caught<sup>3</sup>.



**Figure 17.** The number of Washington pink shrimp vessels, trip and tow observed since 2011<sup>3</sup>.



**Figure 18.** Estimated bycatch (mt), pink shrimp catch (WDFW WaFT), percent bycatch, and excluder panel and fishing light gear requirements for vessels landing in Washington<sup>3</sup>.



**Figure 19.** Documented bycatch species or groups by total weight for the years 2011-2021. During this period these species had at least one year in which documented total bycatch exceeded .5mt. The combined total weight across all years for these 22 species was 61mt.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Shrimp Unid	17.03	355.88	112.40	366.46	185.05	179.84	14.38	74.73	18.59	130.24	95.55
<b>Eulachon</b>	<b>5.68</b>	<b>156.69</b>	<b>202.83</b>	<b>144.02</b>	<b>218.09</b>	<b>31.79</b>	<b>11.50</b>	<b>32.32</b>	<b>139.93</b>	<b>135.72</b>	<b>231.39</b>
Pacific Hake	21.15	0.15	0.03	0.01	400.13	170.95	157.38	36.58	2.71	0.85	11.28
Slender Sole	24.27	20.25	21.06	30.33	40.13	13.73	6.31	7.54	18.80	24.14	97.38
Rex Sole	7.75	4.03	4.42	4.02	11.56	3.86	7.50	6.78	6.85	3.58	30.97
Salp Unid				0.01	0.02	0.29	29.42	30.68	0.00	0.02	0.05
Non-Eulachon Smelt Unid	0.32	0.86	1.21	42.92	12.14	0.03	0.85	0.04	0.02	1.75	0.13
Whitebait Smelt	2.33	2.49	3.28	44.91	1.43	0.01					
Pacific Herring	1.33	0.25	0.21	8.42	13.91	2.98	1.42	0.95	0.91	1.35	1.41
Eelpout Unid	1.97	2.00	5.01	4.97	2.46	4.31	1.42	3.30	3.42	1.52	1.44
Darkblotched Rockfish	1.40	1.59	0.44	6.46	1.99	2.90	3.63	1.20	0.71	2.27	7.65
Non-Humboldt Squid Unid			1.95	8.22	8.76	0.65	0.42	0.16	1.31	0.53	0.77
Arrowtooth Flounder	2.08	2.50	1.04	1.47	2.97	0.25	0.27	0.16	0.25	0.23	4.03
Pacific Sanddab	0.15	0.10	0.01	3.01	5.36	0.55	0.19	1.05	0.31	0.66	1.05
Jellyfish Unid	0.03	0.09	0.25	0.61	8.71	0.28	0.10	0.03	0.33	0.13	0.09
Pacific Ocean Perch	0.14	0.05	0.07	6.63	0.08	0.02	0.19	0.04	0.06	0.10	2.43
Dover Sole	0.95	0.46	0.22	0.48	1.40	0.57	0.39	0.39	1.05	0.66	2.17
Flathead Sole	0.20	1.76	0.52	0.21	4.63	0.68	0.33	0.09	0.05	0.05	0.14
Shortbelly Rockfish	0.00			0.31	0.18	0.24	5.05	0.97	0.31	0.03	0.05
Smelt Unid	0.65	2.80	0.27	3.29		0.05					

**Table 1.** The top 20 bycatch species ranked by total cumulative metric tons for the 2011-2021 period.

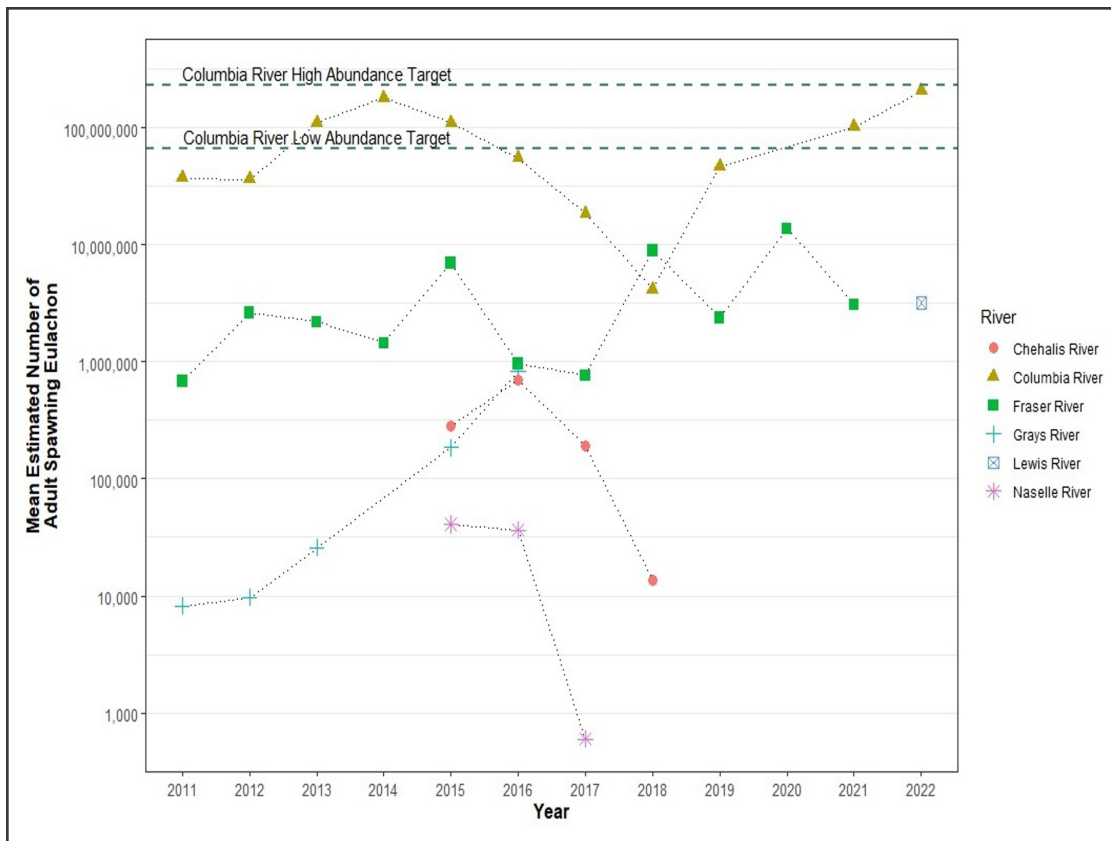
## Eulachon Management and Research

While WDFW shrimp managers strive to reduce bycatch and thereby improve the fishery’s sustainability, our colleagues in the Columbia River Management Unit (CRMU) based at the WDFW Southwest Region 5 office in Ridgefield lead Eulachon management and research.

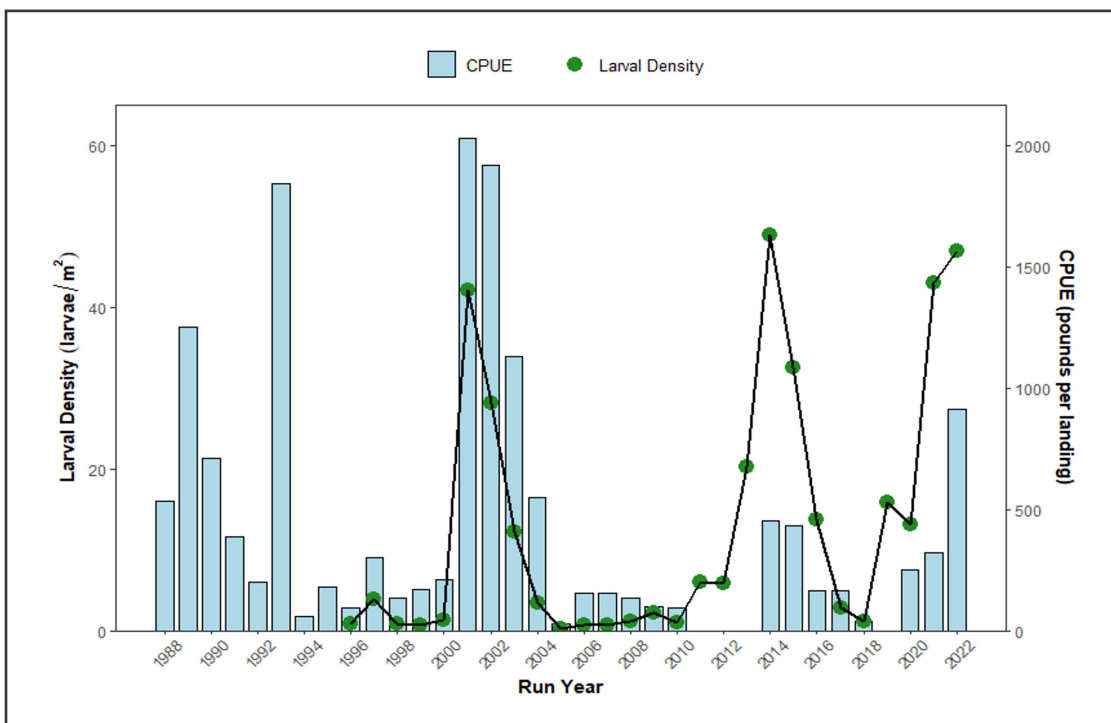
CRMU managers provided the following to highlights of 2022 WDFW accomplishments to better understand Eulachon population abundance and dynamics:

- Continued annual spawning stock biomass estimation for the mainstem Columbia River Eulachon population (upstream from the estuary).

- Comparison of adult Eulachon catch per unit effort (CPUE) in the mainstem Columbia River commercial gillnet fishery and mean larval densities (Figure 21).
- Continued collaboration with Eulachon Technical Recovery and Implementation Team (ETRIT).
- Completed the 2023 Oregon Department of Fish & Wildlife (ODFW) and WDFW joint staff report concerning stock status and fisheries for sturgeon and smelt found at <https://wdfw.wa.gov/fishing/management/columbia-river/compact/other-information>



**Figure 20.** The estimated number of Eulachon spawning in the Columbia, Fraser, Chehalis, Naselle, and Grays rivers in 2011–2022. Estimates are calculated by multiplying the annual Spawning Stock Biomass (SSB) total weight by a standard 11.16 fish per pound. Estimates for the Fraser River derived from data provided by the Canadian Department of Fisheries and Oceans (DFO). The Fraser River estimate for 2022 was not finalized at the time of this publication. No estimate for the Columbia River is available for 2020 due to truncated sampling.



**Figure 21.** Comparison of adult Eulachon catch per unit effort (CPUE) in terms of total pounds per landing in the mainstem Columbia River commercial gillnet fishery and mean larval densities captured at mainstem Columbia index sites using plankton tow nets, 1988–2022. Commercial fisheries CPUE data is not available for 2011–2013 or 2019 due to no fisheries occurring in those years.

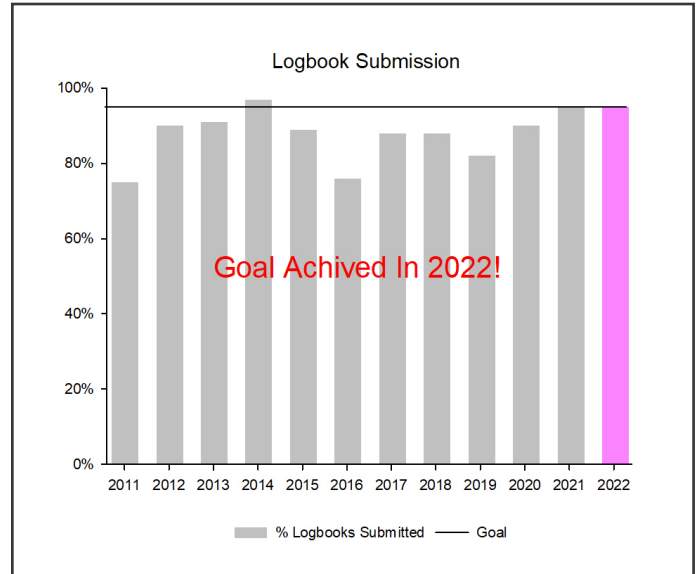
## 2022 Accomplishments

### Logbook Reporting

Logbook compliance remained good in 2022 with 95% of the trips having a completed logbook, which is similar to 2021 (Figure 20). This is the second season since 2014 we have achieved the goal of having a completed logbook for 95% of the shrimp trips. Great work! Please continue to do your part and submit logbooks regularly throughout the entire season.

The drop box located at WA crab is a convenient way to submit logbooks, we are hoping that as awareness increases it will become a habit to use each trip. Logbooks can also be mailed and or handed to the WDFW shellfish technician. Logbooks are legally due by the 10th of the month following any month you've actively fished, and on our end, turning your logbook in on time helps us to process

and enter the data as it comes in.



**Figure 22.** The percentage of trips each year with a submitted logbook.

### Marine Stewardship Council Certification

Fishery performance is audited annually by independent reviewers. In 2022, the audit found the fishery “continues to be a highly performing fishery and an excellent example of state-level and coordinated management” and “...this fishery continues to meet the MSC Fisheries Standard and shall remain certified.”<sup>6</sup>

The current Oregon/Washington MSC certification expires August 2023.

The MSC recently completed the most comprehensive review of the MSC Fisheries Standard ever undertaken in their 25-year history. The new Standard (version 3.0) will come into effect on 01 May 2023. It includes significant improvements, including better protections for marine life, as well as stronger fisheries management and compliance requirements. These improvements will ensure that MSC certified fisheries continue to be recognized as world leaders in sustainability.

To find general information about the MSC program go to: <https://www.msc.org/>

To find notices, assessments, and audit reports specific to the Oregon-Washington ocean pink shrimp fishery go to: <https://fisheries.msc.org/en/fisheries/oregon-and-washington-pink-shrimp/@@view>



### Why is certification important ?

Markets are dynamic but preference for responsibly harvested seafood continues to grow. As much as 50% or more of the shrimp landed in Washington and Oregon are destined for markets that demand sustainably sourced seafood. Fishery sustainability has long been a factor for gaining and maintaining access to European markets; this is true for the US as well.

## Priority Actions

### Improved Catch Area Reporting

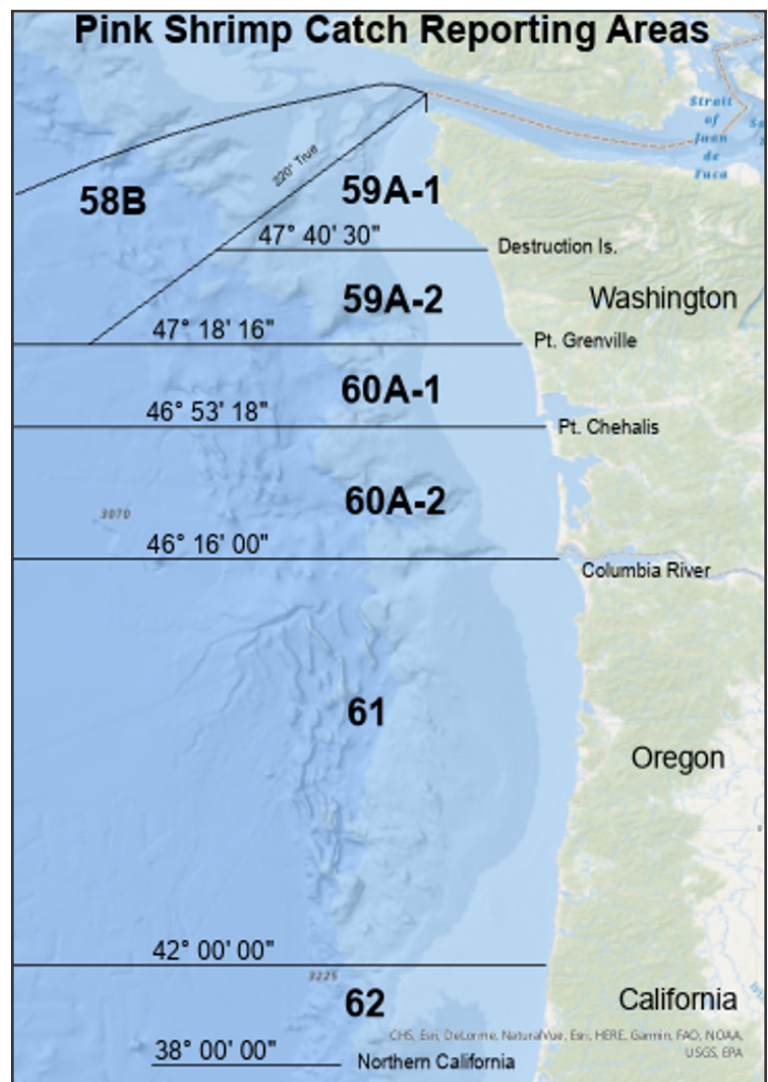
In recent years our analysis of catch by area reported on fish tickets compared to estimated catch by area from logbook data has shown increased deviation. WDFW fishery managers rely on catch area information from fish tickets to characterize fishery patterns and evaluate throughout the season. Therefore, it is very important that shrimpers report all catch areas accurately at the time of landing (**WAC 220-52-040**). If shrimp were caught in multiple catch areas for a single landing, please provide an estimate caught in each area to the buyer.

A map will be distributed to fisherman and dealers that includes the north and south boundaries of each catch reporting area (Figure 23). Buyers will ask for this information from the fisher and should never assume where a vessel fished based on previous trips.

### Logbooks!

We continue to emphasize accurate, complete reporting and timely submission. Logbook data inform us about the fishery. Inaccurate or missing data negatively affect our understanding. If shrimpers get it wrong, so will managers.

Shrimpers are reminded, when filling out your logbook record:



**Figure 23.** Catch area reporting map.

\*If shrimp is caught in multiple areas for a single landing fishers must provide an amount of shrimp caught in each area to the buyer.



🦞 **Total Catch** – In the first column write your estimate for the total catch of pink shrimp for each tow. Record zero only if there is absolutely no catch.

🦞 **Bycatch** – In the second column write your estimate for fish bycatch. Record zero only if there is absolutely no bycatch.

🦞 **Haul Dumped** – If you dumped a tow, or a portion of the tow, record estimated pounds dumped. If no shrimp were dumped write 'N'.

🦞 Record **Number of Lights** on the page header i.e., how many lights you are currently using on your rig?

🦞 **Time** is recorded on a 24-hour clock, commonly known as military time.

🦞 Record the first tow of each day under the Tow# column as 1, the second tow of the day as # 2, etc.... Please do not run TOW# numbers consecutively through the entire trip.

# Prospects for 2023

## Shrimping Prospects for 2023

We look to two models developed by ODFW and the relative strength of the year classes in 2023 to forecast shrimp production for the coming season.

For 2023, the models suggest Oregon landings will around 34 million pounds (environmental model) to 38 million pounds (sampling model). The models predicted 35 and 42 million pounds respectively for the 2022 season against actual Oregon landings of about 41.2 million pounds.<sup>7</sup>

### Three year classes will contribute to shrimp catch in 2023:

🦞 2022 – Age 1

🦞 2021 – Age 2

🦞 2020 – Age 3

The environmental conditions for larval shrimp in 2022 were excellent and that means we should see good numbers of age 1 shrimp in the coming season. Likewise, the 2021 age class producing this year's Age 2 shrimp experienced even better environmental conditions and should be a strong

contributor to this season's catch. Age 3 shrimp will round out the catch and although few live to their third year due to natural and fishing mortality the ones that do survive are large and can contribute substantially by weight.

Models and projections are never certain, but indications point to another good year of fishing in 2023.

A model developed by ODFW comparing many years of shrimp population data and environmental data demonstrates a relationship between ocean conditions and shrimp recruitment to the fishery. Sea-level height measured at Crescent City, CA has proven to be a useful indicator with lower sea-level heights associated with better shrimp recruitment in Oregon. How well this model applies to shrimp recruitment off Washington is uncertain.

# New for 2023

## Electronic Fish Tickets “E-tix”

**Buying  
Shrimp  
in 2022?  
Read this!**

Since 2018, coastal pink shrimp dealers have been using voluntary electronic fish tickets to report landed catch through the Pacific States Marine Fisheries Commission Etix web portal. Electronic catch reporting

has been a valuable tool to streamline the catch reporting process.

As of October 1, 2022, electronic fish ticket reporting is now mandatory for all deliveries of coastal (and Puget Sound) non-treaty commercial Dungeness crab, pink shrimp, coonstripe shrimp, sidestripe shrimp, and spot shrimp into Washington ports. We do not anticipate this will change how shrimp dealers currently submit fish tickets. In 2022 shrimp dealers submitted 100% of shrimp fish tickets electronically.

Dealers that have been reporting voluntarily through Etix can continue to report landings of non-treaty

commercial shellfish. All other dealers that have been using paper fish tickets will need to sign up for either Etix or WaTix. Etix requires a computer whereas WaTix is a new WDFW application for completing electronic fish tickets via a web application or a mobile app.

Visit our website at <https://wdfw.wa.gov/fishing/commercial/wa-tix> for information on signing up for WaTix, as well as reference materials for how to use WaTix and how to fill out a fish ticket. For questions regarding WaTix or for help getting signed up, contact user support at [watixsupport@dfw.wa.gov](mailto:watixsupport@dfw.wa.gov) or **360-480-1675**.

For dealers interested in signing up for Etix, visit <https://etix.psmfc.org/Account/RequestNew> to request an account. You will also need to contact Heidi Rutherford at [Heidi.Rutherford@dfw.wa.gov](mailto:Heidi.Rutherford@dfw.wa.gov) to request a series of fish ticket numbers to input into your Etix account.

## ALERT-New Scientific Moorings north of Grays Harbor

Through funding received from the National Science Foundation, the Quinault Indian Nation and Quileute Indian Tribe in collaboration with the Northwest Association of Networked Ocean Observing System: <http://nanoos.org/> **Explorer** plans to deploy several wave sensor buoys over the next few years. The Mooring Buoys will be located on the Washington shelf between Moclips and Cape Johnson. These Buoys measure just over 12 inches in height and 16 inches across.



**Figure 1.** SOFAR Spotter buoy  
<https://www.sofaroccean.com/>

These instruments are designed to:

- ▶ *Provide real-time, publicly accessible wave data.*
- ▶ *Provide safety for coastal fishers.*
- ▶ *Improve understanding of hydrodynamic processes.*
- ▶ *Inform coastal management best practices.*

Once deployed, the location coordinates will be provided in updates to all ocean users. Questions?

**Contact:**

- ▶ [Jennifer.hagen@quileutention.org](mailto:Jennifer.hagen@quileutention.org) or
- ▶ [jschumacker@quinault.org](mailto:jschumacker@quinault.org)

## Enforcement

As in previous seasons, the WDFW Region 6 Coastal Police Detachment did not report any significant enforcement issues in 2022. Coverage specific to the pink shrimp fishery included:

- ▶ *License inspections*
- ▶ *Monitoring offloads*
- ▶ *Vessel/processor contacts*
- ▶ *Gear compliance checks*

The WDFW Enforcement program has two new officers in Westport. Officer Lanny McOmber and Officer Chris Dean. Both of these officers have completed their required training and are actively working in the field. They also took delivery of their new offshore vessel for marine patrol activities.



# Management

## Collaboration

The ODFW and WDFW pink shrimp teams continue to benefit from a long-standing collaboration, and coordination of management activities, including data sharing, cross-training, enforcement activities, and regular communication. Collaboration is expanding as managers from Washington, Oregon and California are increasingly consulting with each other and sharing information in joint emails and meetings.

## Industry Engagement

Effective management depends on hearing from shrimpers and processors first-hand. While we value our interactions at the dock, we also recognize the importance of formal industry meetings and updates. In the past, managers were able to piggy-back on industry pre-season meetings. While we continue to value in person meetings, we also recognize a virtual format allows greater participation. Meetings typically occur in February or March with advanced notice provided to license holders, vessel operators, processors, and interested stakeholders.

### Coastal Pink Shrimp Fishery listserv

If you would like to receive coastal pink shrimp notices from wdfw, please send your email address to Travis Haring at

**Travis.Haring@dfw.Wa.Gov**

## Wind Energy

At the end of August, the Bureau of Ocean Energy Management (BOEM) notified Washington State agencies that Hecate Energy had made public its unsolicited lease request (ULR), called **Cascadia Wind**. The ULR is for two areas, about 15 miles off Southern Washington for a total of about 403 square miles. The first ULR off Washington was **Olympic Wind** near Grays Harbor. Olympic Wind's proposal is for two areas more than 40 miles offshore and encompasses 291.9 square miles.

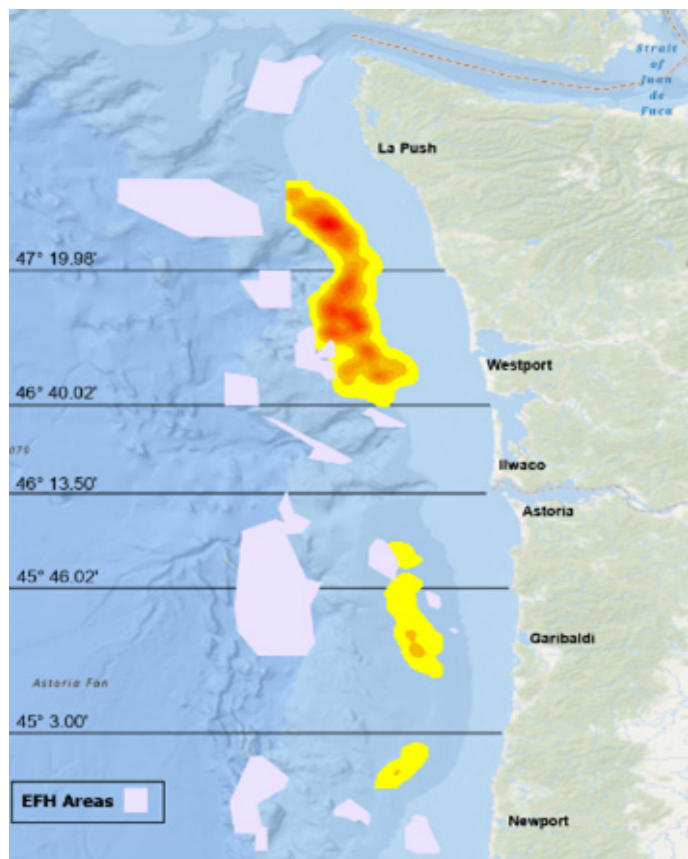
BOEM has stated that they are still reviewing the two ULRs off Washington. BOEM will not post the least requests to its website until they've completed their review and if BOEM staff determines that both lease requests meet all technical, legal, and financial qualifications. BOEM has explained that they don't have an estimate of how long the review will take to complete.

## Essential Fish Habitat

Essential fish habitat (EFH) conservation areas are intended to protect the waters and substrate necessary for fish to spawn, breed, feed or grow to maturity.

As a reminder, NOAA Fisheries announced new rules for Essential Fish Habitat Conservation Areas (EFHCAs) in January 2020 that changed where bottom trawling is prohibited. This prohibition applies to pink shrimp trawling. The longitude and latitude coordinates are available digitally for downloading to your vessel plotters. Go to: <https://www.fisheries.noaa.gov/action/amendment-28-pacific-coast-groundfish-fishery-management-plan>

We mapped 2021 Washington pink shrimp logbook data and the revised/new EFH areas (Figure 24). For confidentiality purposes individual tow data cannot be depicted here, but in developing the map we examined data at the vessel level and found compliance to be excellent.



**Figure 24.** Heat map of fishing effort and EFH areas.

## Fishing Regulations

### *Coordination with Oregon and California*

While most regulations are similar, when fishing offshore another state shrimpers are reminded to confirm that their operations conform to that state's regulations. For example, Oregon law does not authorize the landing of frozen shrimp, whereas this activity is permissible via permit in Washington. Also, Oregon licensed shrimpers can trawl in that state's territorial waters; conversely, Washington

does not allow any trawling in its coastal territorial waters (0-3 miles).

Fishing lights are required in all three states.

Shrimp trawl logbooks are required by both WDFW and ODFW, and each agency will accept the other state's logbook.

### *Freezing at Sea*

Washington regulations do not explicitly prohibit freezing catch at sea. However, to address fishery specific needs, the pink shrimp trawl fishery permit requires those who intend to process shrimp at sea off Washington by freezing their catch to:

- ▶ *notify the WDFW their intent to do so;*
- ▶ *notify WDFW personnel 24 hours in advance of landing; and,*
- ▶ *provide (upon request) WDFW a sample of 25 pounds of whole shrimp processed at sea by freezing and a sample of 25 pounds of fresh shrimp from the same trip.*

### *Vessel Monitoring System (VMS)*

The National Marine Fisheries Service requires any vessel using non-groundfish trawl gear in federal waters to have VMS installed. Declaration reports are also mandated prior to fishing. Specific compliance information can be found at the NMFS Vessel Monitoring System website at: <http://www.westcoast.fisheries.noaa.gov/fisheries/management/vms.html> or contact the NMFS Office of Law Enforcement (OLE) at **206.526.6140**

### *Groundfish Limits*

Limits have not changed from 2021

Shrimp trawlers are limited to 1,500 pounds of groundfish per TRIP with a daily limit of 500 pounds. Included in the daily and trip limits are sub-limits for: lingcod at 300 pounds per month with a 24"

minimum size, and sablefish at 2000 pounds per month. Canary rockfish, yelloweye rockfish and Thornyhead rockfish are all PROHIBITED. All other groundfish species taken count towards the 500 per day or 1,500-pound trip limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp



landed. The pink shrimp fishery is not subject to Rockfish Conservation Area (RCA) provisions.

A complete copy of Pacific Coast Groundfish Fishery management measures for 2022 as well as in-season adjustments to trip limits can be here: <https://www.fisheries.noaa.gov/species/west-coast-groundfish#commercial> under **Open Access (OA) Gears North of 40° 10' N Lat.**

## Fishing Lights

Washington shrimpers are required to use fishing lights on the footrope of each trawl net. Similar rules apply when fishing off Oregon. Shrimpers fishing both Washington and Oregon should note the specifications are the same for both states.

The need to minimize bycatch is important NOT ONLY when bycatch volumes are high. Low bycatch volumes can reflect poor abundance, **making the use of lights even more important.**

### Footrope lighting devices must meet the following criteria:

- ▶ Lighting devices must be operational,
- ▶ Lighting devices must be securely attached within

six inches of the forward leading edge of the bottom panel of trawl netting; and,

- ▶ Each trawl net must have a minimum of five lighting devices, spaced four feet apart in the central sixteen feet of each net.

### Four lighting devices are approved for use. Green is the only approved color.

- ▶ Rock-engineering "LED Rope Light"
- ▶ Fish Tek Marine, NetLight and PotLight (added in 2022)
- ▶ Catch All Tackle "Deep Drop LED Fishing Light"
- ▶ Lindgren-Pitman "LP Electrolume Light"



## Crewmember License

Crewmember licenses are required for all individuals age 16 and older working on-board all commercial fishing vessels that land fish or shellfish in Washington State.

- ▶ An individual can purchase their own crewmember license that is valid for participating in all Washington commercial fisheries.
- ▶ A vessel operator can purchase up to two undesignated crewmember licenses to accommodate crewmembers who do not have their own individual crewmember license. The undesignated crewmember license is assigned to the vessel and covers only one crewmember at a time but will allow for frequent crewmember changes.
- ▶ Primary and alternate operators are exempt from needing to purchase a crewmember license if they are on board a vessel that designates them as an operator. Immediate family members, including spouses, children, or grandchildren

of the license owner or alternate operator are exempt from the crewmember licensing requirement.

- ▶ Individual crewmember licenses can be purchased at any license vendor or online through WILD. The cost is \$40.50 for Washington state residents and \$123.00 for non-residents. Undesignated individual crewmember licenses cost \$35 for Washington state residents and \$110.00 for non-residents and can only be purchased when applying for or renewing a commercial fishing license.

For more information or to purchase a crewmember license go to: <https://wdfw.wa.gov/licenses/commercial/miscellaneous>

### Logbook Drop Box

With cooperation of Washington Crab Producers, WDFW will continue to maintain a secure logbook drop box in Westport. You will find this in the Washington Crab weigh shack or buying station on the Dock Street dock, in Westport.

Please use this location to drop off your logbooks at the time of landing. Only our staff will have access to the contents of the box, and they will regularly collect logbooks from this location. It is our hope that this convenience will make it easier for you and provide us logbooks in a timely fashion. Of course, you are still welcome to mail your logbooks to us, drop them off at our Montesano Office or hand them to a WDFW shrimp technician at port.



**Figure 22.** The percentage of trips each year with a submitted logbook.

### Our office location and mailing address are:

**WDFW  
Region Six Office  
48 Devonshire Road  
Montesano, WA 989563**

### Reminder:

Logbooks are due by the 10th day of the month following any shrimp fishing activity.



# Contact Information

## **Zach Forster**

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Intergovernmental Policy Coordinator  
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[Lorna.Wargo@dfw.wa.gov](mailto:Lorna.Wargo@dfw.wa.gov)

## **Our Website:**

[wdfw.wa.gov/fishing/](http://wdfw.wa.gov/fishing/)

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1. Somers, K. A., J. E. Jannot, K. E. Richerson, V. J. Tuttle, and J. T. McVeigh. 2021. Fisheries Observation Science Program Coverage Rates, 2002–20. U.S. Department of Commerce, NOAA Data Report NMFS-NWFSC-DR-2021-02. <https://doi.org/10.25923/9rpa-9t92>
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4. Jannot, J. E., K. A. Somers, V. Tuttle, J. McVeigh, J. V. Carretta, and V. Helker. 2018. Observed and Estimated Marine Mammal Bycatch in U.S. West Coast Groundfish Fisheries, 2002-16. U.S. Department of Commerce, NWFSC Processed Report 2018-03.
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6. Groth, S.D., Blume, M., and J.M. Smith (2022). 33rd Annual Pink Shrimp Review. Oregon Department of Fish and Wildlife Marine Resources Program, Newport, Oregon. 11 pp.

Individuals who need to receive this information in an alternative format, language, or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact the Title VI/ADA Compliance Coordinator by phone at 360-902-2349, TTY (711), or email [Title6@dfw.wa.gov](mailto:Title6@dfw.wa.gov). For more information, see [wdfw.wa.gov/accessibility/requests-accommodation](http://wdfw.wa.gov/accessibility/requests-accommodation).