

# Washington State Board of Pilotage Commissioners

## Quarterly Key Performance Indicators Dashboard

12 MONTHS ENDING: Dec 31, 2023

### Safety

#### Rest Rule Exceptions

**Puget Sound District**  
KPI target: rate of 0.3% or less (3 or less per 1000 assigns)

2023 Q1	2023 Q2	2023 Q3	2023 Q4
0.45% ❌ 1555 assigns 7 rest exc.	0.00% ✅ 1739 assigns 0 rest exc.	0.31% ❌ 1926 assigns 6 rest exc.	0.27% ✅ 1819 assigns 5 rest exc.

The BPC Pilot Safety Committee reviews rest rule exceptions each quarter.

Rest rules require 1) that pilots have 10 hours rest between assignments, 2) that multiple assignments (e.g. harbor shifts) not exceed 13 hours total duration.

**Grays Harbor District**  
KPI target: 1 or less per year

2023 Q1	2023 Q2	2023 Q3	2023 Q4
0 ✅ 75 assigns 0 rest exc.	0 ✅ 59 assigns 0 rest exc.	0 ✅ 39 assigns 0 rest exc.	0 ✅ 70 assigns 0 rest exc.

This KPI excludes rest rule exceptions associated with emergent situations. The most common emergent situation is a ship dragging anchor in severe weather.

#### Unsafe Transfer Arrangements Resulting in Fall or Injury

KPI target: 0

2023 Q1	2023 Q2	2023 Q3	2023 Q4
0 ✅	0 ✅	0 ✅	0 ✅

This KPI counts occurrences where a pilot or pilot trainee falls or is injured while embarking or disembarking a vessel with noncompliant transfer arrangement, or is physically endangered regardless of whether the incident results in physical injury.

#### Pollution Incidents (Spills) with Pilot Error

KPI target: 0

2023 Q1	2023 Q2	2023 Q3	2023 Q4
0 ✅	0 ✅	0 ✅	0 ✅

This KPI counts occurrences where actual or apparent collision, allision or grounding or navigational occurrence results in environmental damage (pollution/spill), with pilot error a contributing factor.

#### Other Incidents (Non-Pollution) with Pilot Error

KPI target: 0

2023 Q1	2023 Q2	2023 Q3	2023 Q4
0 ✅	0 ✅	0 ✅	0 ✅

This KPI counts occurrences where actual or apparent collision, allision or grounding or navigational occurrence results in personal injury or property damage, with pilot error a contributing factor. (Pilot injury associated with noncompliant transfer arrangements reported under Unsafe Transfer Arrangements.)

### Diversity, Equity, and Inclusion

#### DEI Committee Meetings

KPI target: 1 meeting per quarter or more

2023 Q1	2023 Q2	2023 Q3	2023 Q4
NONE ❌	June 5 ✅ DEI Steering Committee	July 6 ✅ DEI Steering Committee	NONE ❌

#### DEI Events Attendance and/or Sponsorship

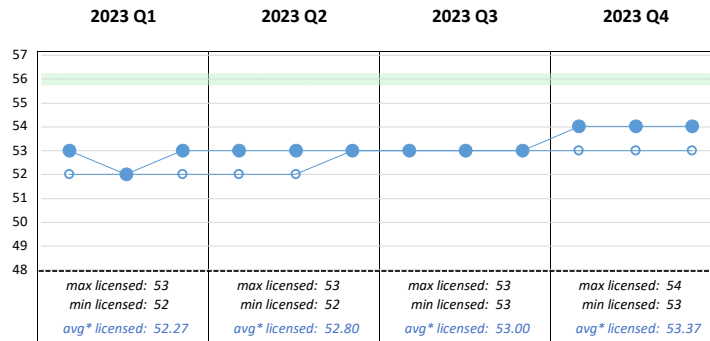
KPI target: 3 events per year or more

Year	Date	Event	Location	Atten.	Spons.
2023	Mar 1-2	Women in Maritime Leadership	Vallejo CA	✅	✅
2023	Aug 23	Women Offshore Inclusion Summit	Online	✅	
2023	Oct 11-13	Pride in Maritime	Online	✅	
2023	Oct 25-27	Women Offshore Conference	Houston TX	✅	✅

### Pilot Training and Licensing

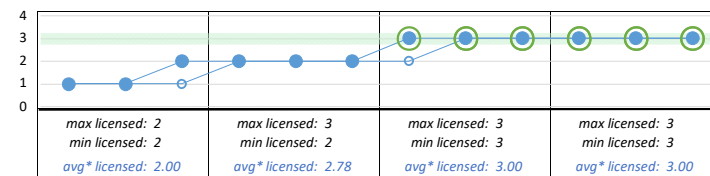
#### Number of Licensed Pilots

**Puget Sound District**  
KPI target: authorized number of pilots (currently 56)



\*average takes into account mid month retirements & licensures – it is calculated using aggregate licensed days of all pilots

**Grays Harbor District**  
KPI target: authorized number of pilots (currently 3)



\*average takes into account mid month retirements & licensures – it is calculated using aggregate licensed days of all pilots

**PUGET SOUND PILOTAGE DISTRICT ACTIVITY REPORT PAGE 1**

**Jan-2024**

The Board of Pilotage Commissioners (BPC) requests the following information be provided to the BPC staff **no later than two working days prior to a BPC meeting** to give Commissioners ample time to review and prepare possible questions regarding the information provided.

Activity									
Total pilotage assignments:	627				Cancellations:	24			
Total ship moves:	603	Cont'r:	184	Tanker:	210	Genl/Bulk:	111	Other:	98
Assignments delayed due to unavailable rested pilot:			7			Total delay time:	16.75	hours	
Assignments delayed for efficiency reasons:			13			Total delay time:	28	hours	
Billable delays by customers:			70			Total delay time:	204		
Order time changes by customers:			176						
2 pilot jobs:	50	Reason:	PSP GUIDELINES FOR RESTRICTED WATERWAYS						
Day of week & date of highest number of assignments:	WED 1/3								29
Day of week & date of lowest number of assignments:	MON 1/1								12
Total number of pilot repositions:	107	Upgrade trips	23	YTD	23				
3 consecutive night assignments:	31	YTD	31						

Callback Days/Comp Days					
	Starting Total	Call Backs (+)	Used (-)	Burned (-)	Ending Total
Licensed	2558	63	39		2582
Unlicensed	26			15	11
<b>Total</b>	<b>2584</b>				<b>2593</b>

**On watch assignments 561      Call back assignments 66      CBJ ratio 10.52%**

**Pilots Out of Regular Dispatch Rotation (pilot not available for dispatch during "regular" rotation)**

**A. Training & Continuing Education Programs**

Start Dt	End Dt	City	Facility	Program Description	Pilot Attendees
11-Jan	22-Jan	Sydney AU	Port Ash	Manned Model	GRD(off 6, on 5*)
24-Jan	25-Jan	Seattle	PMI	ULCV	BOU, MEL, NIN (off 6)
1-Jan	31-Jan			UPGRADE ASSIGNMENTS ON DUTY	MIL (1), RID (1)
1-Jan	31-Jan			UPGRADE ASSIGNMENTS OFF DUTY	BOZ (5), GRK (2), KNU (1), MAN(1), MIL(2), RID (2), SEA(1), STA (3), VEL (4)
					*On watch    Off watch    ** paired to assign.
					7            33

**B. Board, Committee & Key Government Meetings (BPC, PSP, USCG, USACE, Port & similar)**

Start Dt	End Dt	City	Group	Meeting Description	Pilot Attendees
4-Jan	4-Jan	Seattle	PSP	Rate Committee	GRK*, KLA, KNU*, MCG
5-Jan	5-Jan	Seattle	BPC	BPC Prep	ANT, BEN, COL*, KNU
6-Jan	6-Jan	Seattle	PSP	Least Depth Survey T-5	KEN, LOB, NIN*, SID, STA*
7-Jan	16-Jan	Seattle	PSP	President	GRK(on 10*)
8-Jan	8-Jan	Seattle	PSP	Pilot Safety Committee	ANA, SCR*
10-Jan	10-Jan	Seattle	PSP	Transportation	BOS, KLA, MYE, RID
10-Jan	10-Jan	Seattle	PSP	OTSC	BOU**
11-Jan	11-Jan	Seattle	BPC	BPC Exam Prep	ANT, NIN*

**pg 2, B. Board, Committee & Key Government Meetings (BPC, PSP, USCG, USACE, Port & similar)**

Start Dt	End Dt	City	Group	Meeting Description	Pilot Attendees
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11-Jan	11-Jan	Seattle	PSP	Training Administration	BOU*, MAN*		
11-Jan	11-Jan	Seattle	PSP	Outreach	BOZ*, NIN*		
12-Jan	12-Jan	Seattle	PSP	Rate Committee	KLA, KNU, MCG		
16-Jan	16-Jan	Seattle	PSP	BOD	GRK*, HAM*, HUP*, KLA, MCG, MYE*		
16-Jan	16-Jan	Seattle	PSP	Crowley/EPL Discussion	BOU*		
16-Jan	16-Jan	Seattle	BPC	DOE/OTSC	BOU*		
16-Jan	16-Jan	Seattle	PSP	Outreach	ANT*		
17-Jan	23-Jan	Seattle	PSP	President	KLA(off 1, on 6*)		
17-Jan	17-Jan	Seattle	BPC	TEC	ANT*, BEN*, NIN		
17-Jan	17-Jan	Seattle	PSP	NWSA	LOB*		
17-Jan	17-Jan	Seattle	BPC	BPC Prep	ANT*, BEN*, KNU*		
18-Jan	18-Jan	Seattle	BPC	BPC	ANT*, BEN*, KNU*		
18-Jan	18-Jan	Seattle	PSP	PMI, Simulator	COL*		
22-Jan	22-Jan	Seattle	PSP	Outreach	KLA*		
23-Jan	23-Jan	Seattle	PSP	Transportation	KLA*		
23-Jan	23-Jan	Seattle	PSP	NWSA, ACOE	LOB*		
25-Jan	25-Jan	Seattle	PSP	Outreach	KNU*		
25-Jan	25-Jan	Seattle	PSP	Outreach	STA, VON		
25-Jan	25-Jan	Seattle	PSP	NOAA	SEA, SLI*		
26-Jan	26-Jan	Port Angeles	PSP	Pilot Station	MYE**		
28-Jan	28-Jan	Seattle	PSP	Least Depth, Blair WW	LOB*		
29-Jan	29-Jan	Seattle	BPC	Exam planning	BEN		
29-Jan	29-Jan	Everett	PSP	Outreach	COL, RID		
30-Jan	30-Jan	Seattle	PSP	Safety, Blair WW	BOU*, GRK*, HAM*, HUP, JEN, KLA*, MOC		
"	"	"	"	"	MYE, LOB*, MCG*, MIL*, SEM*		
31-Jan	31-Jan	Seattle	BPC	OTSC	BOU*		
					* On Watch	Off Watch	** paired to assign.
					59	31	2

**PUGET SOUND PILOTAGE DISTRICT ACTIVITY REPORT PAGE 2**

Safety/Regulatory

Outreach

Administrative

**C. Other (i.e. injury, not-fit-for-duty status, COVID risk)**

Start Dt	End Dt	REASON	PILOT
29-Jan	31-Jan	NFFD	SES

# Puget Sound District Activity Report Dashboard

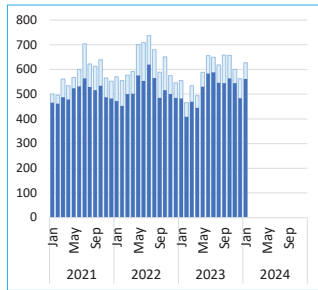
2024 January

Licensed Pilots  
Including President  
**54**

PS District  
Trainees  
**7**

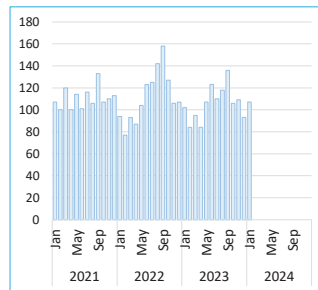
No changes in January.

Total Assignments  
**627**



561 On-Watch (dark blue), 66 Off-Watch (light blue)

Repositions  
**107**



Licensed Pilots w/o Pres **53**  
Pilots NFFD entire month **0**  
Available Pilots **53**

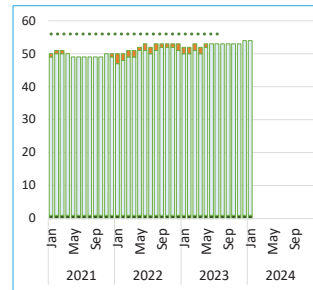
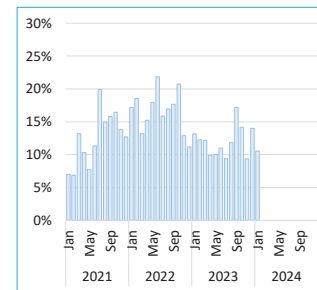
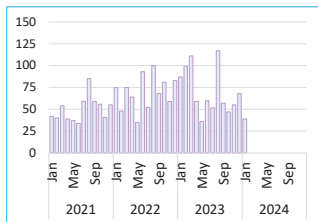


chart also includes president (1 pilot)

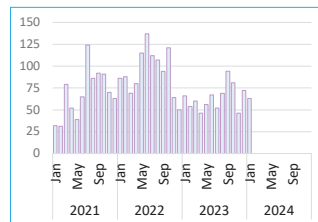
Off-Watch Assignments  
(Callbacks)  
**11%**



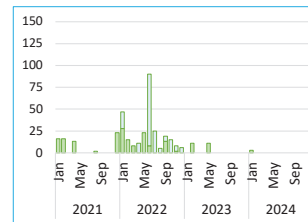
Comp Days Used  
(Licensed Pilots)  
**39**



Comp Days Earned  
(Callbacks)  
**63**

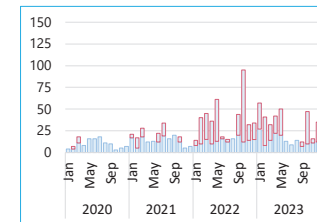


COVID Days\* **0**  
NFFD Days\* **3**



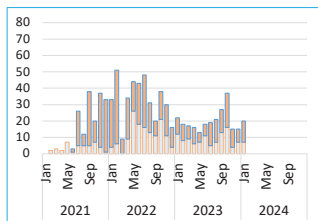
count of NFFD days if pilot(s)  
not NFFD whole month

Training Days **17**  
Upgrade Trips **23**



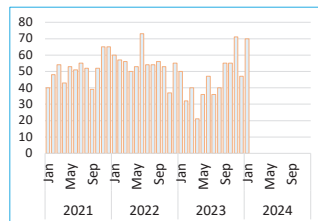
training days (red) stacked  
on upgrade trips (blue)

Pilot Delays (Count)  
combined total  
**20**

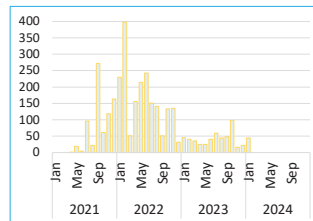


efficiency delay counts stacked on top  
of pilot shortage delay counts on bottom

Billable Delays (Count)  
by Customers  
**70**

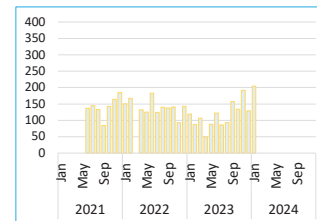


Pilot Delay Hours  
(Pilot Shortage & Efficiency)  
**44.75 hrs**

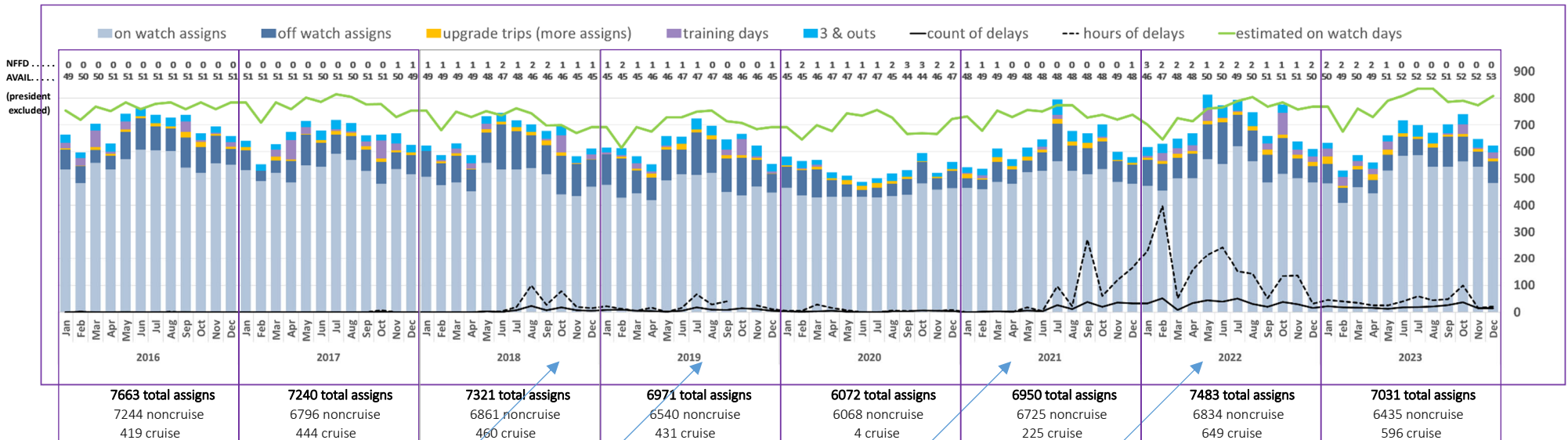


total pilot delay hours (not separated into  
efficiency & pilot shortage components)

Billable Delay Hours  
by Customers  
**204 hrs**



# Puget Sound District pilot availability, pilotage assignments and additional duties, and delays 2017 – 2023



### Policy Statement adopted by BPC 10/18/2018 & RCW 88.16.103 revised effective 7/28/2019

- ~ 10 hrs minimum off duty between assignments (increased from 8 hrs, eliminates round trip cruises)  
**PSP implemented in October 2018**
- ~ 13 hrs max duration for multiple harbor shifts (limits options for multiple assignments)  
**PSP implemented in July 2019**
- ~ Three-and-out rule requiring additional rest after 3 consecutive night assignments  
**PSP implemented in 2015 – already part of operating rules**

### WAC 363-116-081 Rest period. Revised effective 4/19/2021

Defines “assignment” consistently as call time to check in time for both rest calculations AND night assignment definition (increasing number of night assignments, increasing 3 & outs).

### WAC 363-116-081 Rest period. Revised effective 7/24/2022

Allows “multiple assignments” (instead of only “multiple harbor shifts”), as long as total duration does not exceed 13 hrs (improves dispatch efficiency.)  
**PSP implemented in May 2022, along with other efficiency measures.**

This chart compares aggregate on-watch pilot availability to aggregate assignments & nonrevenue tasks each month and shows timing of rest rule changes and increased delays.

- ~ Everything is on the same axis – all values are counts.
- ~ Green line shows aggregate on-watch days each month (pilot availability) calculated as follows:
  - ~ count pilots who were licensed during the month (exclude president and any pilot(s) NFFD entire month),
  - ~ multiply by number of days in month
  - ~ subtract NFFD days for any pilot NFFD for part of the month & subtract prelicense/postretirement days of pilots who were licensed mid-month or retired mid-month  
*(pilots are included in count but unlicensed days are subtracted from aggregate days (green line),*
  - ~ multiply total (aggregate licensed days) by 0.496 (accounts for off-watch respite & ETO) to get on-watch days;
  - ~ add any PPW (peak period work) days during cruise season to get total aggregate on-watch days.
- ~ Stacked bars show on-watch assignments, off-watch assignments, upgrade trips, training days, and 3 & outs. **Meetings are not shown.**
- ~ Black lines represent count of delays (solid line) and hours of delays (dotted line).

It was expected that increased rest requirements adopted by BPC in October 2018 (revised RCW effective 07/28/2019) would reduce the number of assignments pilots are able to complete on-watch, but decreased vessel traffic during the pandemic mitigated impacts of both the increased rest requirement and the worsening pilot shortage, and delays continued to be uncommon. However, in 2021, when vessel traffic returned to pre-pandemic levels and beyond, delays increased significantly. Delays have come under control as PSP continues to implement dispatch efficiencies while BPC’s training program slowly but steadily resolves the pilot shortage.



## WA State Board of Pilotage Commissioners Industry Update January 18, 2024 Meeting

### After Down Year, January Ticks Up by 7

- |                         |                         |
|-------------------------|-------------------------|
| ✚ Containers up 7       | ✚ Car Carriers up 4     |
| ✚ Bulkers <b>down</b> 3 | ✚ Tankers <b>down</b> 5 |
| ✚ General up 3          | ✚ ATB's up 2            |
| ✚ Other <b>down</b> 3   | ✚ RoRo up 2             |

### Ship Calls Correlate to Pilotage Assignment Demand

As stated previously, we report ship calls as one metric for a gateway to measure activity in addition to cargo volumes or passengers handled. Ship calls also correlate to pilotage demand as the ratio of total assignments to ship arrivals has been relatively consistent over the years.

Given that our seasonality is essentially based on whether we are in cruise season or not, it is useful to take a look at total and daily average arrivals each month over a number of years as it paints a useful picture. We continue to strongly recommend daily assignments compared to number of pilots on duty AND available with reasons listed for not being available like NFFD.

The following table provides a comparison of January arrivals for each of the years since 2015 (Source: Marine Exchange).

### January Arrivals and Daily Arrival Average Since 2015

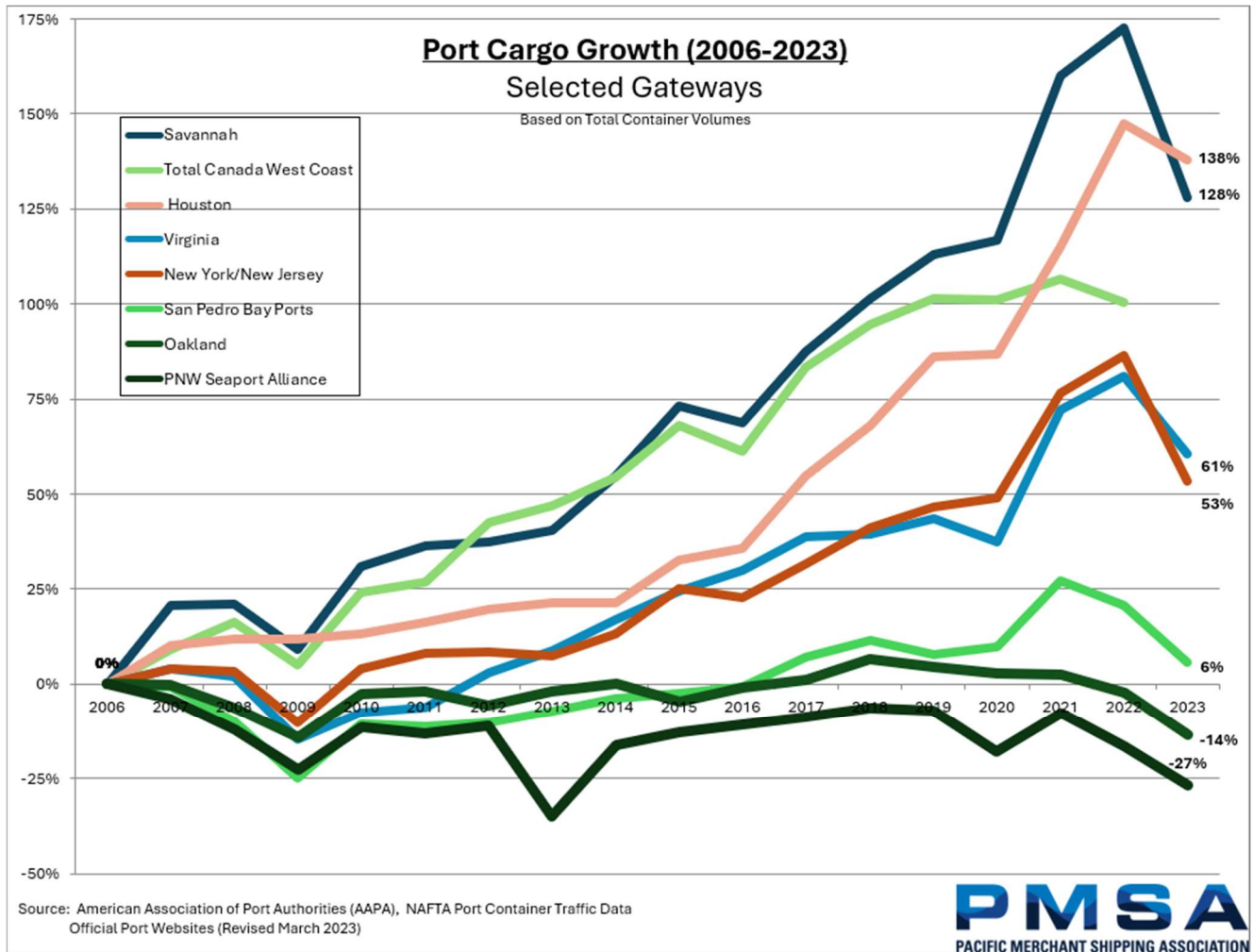
2015		2016		2017		2018		2019		2020		2021		2022		2023	
Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals	Daily Avg	Arrivals
6.42	199	6.45	200	6.52	202	6.13	190	6.71	208	6.23	193	5.61	174	5.48	170	5.97	185

Note that a key rest policy was reflected in updated PSP Operating Rules as reflected in the BPC 2015 Annual Report. So, impacts on delays, number of callbacks and so on should be evaluated before and after such policies were implemented to gain insight into impacts of such changes.

#### Port Competitiveness

Much is written about port competitiveness and market share and trends in port calls particularly in the container trade (Red Sea, Suez, Panama, West Coast, Canada, etc.). The PMSA Monthly Trade Report adds data and commentary to this dynamic in addition to the near continuous articles written about it.

Here is a snapshot of TEU volumes/trends from 2006 through 2023 for selected gateways.



These are not the only ports competing to get into the mix – here is an article on Florida.

**Florida seaports set back-to-back record-high cargo growth, proving Florida is America’s supply chain solution** posted by AJOT | Jan 31 2024 at 10:28 AM | [Ports & Terminals](#)

For the second year in a row, Florida’s system of public seaports experienced record-high cargo growth, and set a new record-high number of cruise passenger embarkations, a newly released report from the Florida Seaport Transportation and Economic Development Council (FSTED) shows.

For 2023, Florida’s system of seaports handled 114.25 million tons of cargo, shattering the 2022 record-high 112.5 million tons of cargo moved. This 1.5 percent year-over-year growth rate is proof that investments by the Florida Legislature and Governor Ron DeSantis have well-positioned Florida to be America’s supply chain solution.

“The entire world knows that if you want to move cargo efficiently and effectively, you need to use Florida’s ports,” said Governor Ron DeSantis. “While other states like California have continued to experience supply chain disruptions in the past year due to mismanagement, Florida is setting new records. The Sunshine State continues to be America’s supply chain solution.”

Additionally, the report shows why Florida is the cruise capital of the world. In 2023, the total number of cruise passengers across all Florida seaports reached a new record high of 19.4 million, marking a 3.1 percent compound annual growth rate since 2010. This figure represents an increase of more than one million additional passengers over 2019 levels, the previous record year.



**DECEMBER 2023**

## Partial Tallies

We note that the National Retail Federation’s collaboration with Global Port Tracker (NRF/GPT) yielded a January 7 press release stating that the thirteen major U.S. ports it monitors would see the arrival of 1.93 million TEUs in December. That, according to NRF/GPT metrics, would represent a 11.5% year-over-year jump in containerized import traffic.

But here’s what we know from our sources about how things went in December down along the waterfront.

As usual, we start in Southern California, where the nation’s two busiest container ports announced huge year-over-year increases in December, albeit over a relatively slow month for inbound loads last year.

The **Port of Los Angeles** posted a 3.6% year-over-year gain in inbound loads to 364,661 in December. Still,

that was down 2.4% from December 2019. For all of 2023, inbound loads added up to 4,441,330, down 5.8% from 2019. Outbound loads in December jumped by 26.0% from a year earlier but were nonetheless 6.6% below December 2019. For the year, outbound loads (1,291,997) were down 26.4% from 2019. Overall container traffic (loads and empties) last year totaled 8,629,682, down by 7.6% from 2019.

Next door at the **Port of Long Beach**, inbound loads in December (333,329) surged by 37.9% over the previous December and exceeded December 2019’s volume by 3.1%. Inbound loads YTD (3,804,356) topped the number of inbound loads in 2019 by 1.2%. Outbound loads in December (103,688) were down 10.4% from a year earlier and off by 17.3% from December 2019. Total container traffic

through the port in 2023 (8,018,668) was up by 5.1% from 2019.

Together, the two San Pedro Bay ports handled 16,648,349 loads and empties in 2023, 1.9% below the total volume the ports handled in 2019. Inbound loads (8,250,503) in 2023 were down 2.6% from 2019, while outbound loads were off by 20.3%.

At the **Port of Oakland**, inbound loads (76,347) in December were up 16.4% y/y but still 6.1% below December of 2019. YTD, inbound loads (838,231) were down 14.0% from 2019. Meanwhile, outbound loads in December (65,801) rose 12.9% y/y but were down 11.8% from the last month of 2019. On a YTD basis, outbound loads (736,213) were down 20.9% from 2019. Total container traffic through the Northern California port in 2023 (2,065,709) was down 17.4% from 2019.

*We Make Cargo Move*



**The Port**  
**OF HUENEME**







## Partial Tallies

Continued

Up in Washington State, the **Northwest Seaport Alliance Ports** (Tacoma and Seattle) saw year-over-year increases in their December container volumes. Inbound loads (88,101) were up 3.4% from a year earlier, while outbound loads soared by 44.6% to 67,622. Even so, the ports finished the year well shy of their 2019 numbers. December's inbound loads were down 16.7% from December 2019, while the 1,078,005 inbound loads that came through the ports in all of 2023 were fewer by 21.3% than 2019's volume. Similarly, outbound loads in December were down 10.9% from the same month in 2019, while the 588,744 outbound loads shipped this year were off 35.5% from 2019.

Collectively, the seven USWC ports we monitor handled 10,354,990 inbound loads in 2023. Outbound loads meanwhile totaled 3,931,983 for the year. Compared to pre-pandemic 2019, those annual totals were down 4.4% and 22.8%, respectively.

Across the border at British Columbia's **Port of Vancouver**, inbound loads in December (144,504) were up 2.8% over December 2019.

However, outbound loads (70,649) were down 18.7% from that last month of 2019. For the entire year, total container traffic (3,125,559) at Canada's largest container port was 8.0% below the volume the port handled in 2019.

The **Port of Prince Rupert** continues to see declining container volumes in December. Inbound loads (32,217) were down y/y by 25.2% and by 47.9% from the last month of 2019. For the entire year, inbound loads (322,170) were 45.6% below 2019. Outbound loads (12,123) in December slipped lower by 1.2% year-over-year but were down 30.1% from December 2019. The port's traffic in outbound loads in 2023 trailed 2019 by 34.8%. Total container trade in 2023 (704,248) was down 41.8% from 2019.

Back East, while the **Port of New York/New Jersey** takes a leisurely approach to posting its latest month's cargo numbers, the **Port of Virginia** reported 121,630 inbound loads in December, a 3.3% fall-off from a year earlier but a 17.3% increase over December 2019. For the year, inbound loads (1,525,900) were down 11.7% year-over-year but up 11.7% from

December 2019. Outbound loads this December (91,758) were up 1.0% from a year earlier but up 17.2% over December 2019. For all of 2023, outbound loads totaled 1,101,620, a 14.0% gain over 2019. Total container traffic through the port this year (3,287,546) represented an increase of 11.9% over 2019.

Further south, the **Port of Charleston** saw a flattening of its overall container traffic. To be sure, December brought 103,556 inbound loads, a 26.6% bump over December 2019. That also gave the South Carolina maritime gateway a full year total of 1,220,384 inbound loads, 14.4% more than the annual volume in inbound loads it had handled in 2019. But outbound traffic was off both y/y and from 2019. So, despite the hubbub about rising container volumes through ports in the Southeastern quadrant of the nation, total traffic of loads and empties (2,482,080) in 2023 was just 1.9% higher than the 2,436,185 the port handled in 2019.

As we go to print, the Georgia Ports Authority has yet to post December's TEU tallies for the **Port of Savannah**.

**Protecting Blue Whales and Blue Skies**  
**Vessel Speed Reduction Incentive Program**  
 A partnership for cleaner air,  
 safer whales, and a quieter ocean  
[www.bluewhalesblueskies.org](http://www.bluewhalesblueskies.org)



## FOR THE RECORD

# November 2023 TEU Numbers

**Exhibits 1-3** provide the details on inbound and outbound loads as well as total container traffic (loads plus empties) through the twenty-one North American ports this newsletter surveys. All of the container numbers are in TEUs.

**Exhibit 1** shows that the nineteen U.S. ports we survey report having handled 2,003,771 inbound loads in November, up 6.5% from a year earlier. That figure also represented a 12.4% gain over the 1,781,967 inbound loads the same ports had handled in pre-pandemic November 2019. The seven U.S. West Coast container ports from San Diego to Seattle that we track reported a sharp 23.7% year-over-year jump in inbound loads in November. At the ten Atlantic Coast ports we surveyed, inbound loads in November were down 2.9% from a year earlier, while inbound loads at the two Gulf Coast ports that make their monthly TEU tallies publicly available were off by 14.4% from the previous November.

Comparing this November with the same month four years earlier, inbound loads through U.S. West Coast ports were up 7.9%, while U.S. East Coast ports recorded a 14.5% increase. The two U.S. Gulf Coast ports we follow registered a 32.1% rise in inbound loads over November 2019.

Looking at coastal shares of the inbound trade, 45.6% of November's crop of 2,003,771 inbound loads were discharged at U.S. West Coast

Exhibit 1	November 2023 Inbound Loaded TEUs at Selected Ports				
	Nov 2023	Nov 2022	Nov 2021	Nov 2020	Nov 2019
Los Angeles	384,619	307,080	403,444	464,820	371,350
Long Beach	355,339	259,442	362,394	382,677	293,287
<b>San Pedro Bay Total</b>	<b>739,958</b>	<b>566,522</b>	<b>765,838</b>	<b>847,497</b>	<b>664,637</b>
Oakland	71,258	68,646	83,097	78,048	77,367
NWSA	87,295	86,708	59,341	72,746	94,978
Hueneme	9,886	10,820	9,882	5,276	4,725
San Diego	5,668	6,004	6,062	7,106	5,772
<b>USWC Total</b>	<b>914,065</b>	<b>738,700</b>	<b>924,220</b>	<b>1,010,673</b>	<b>847,479</b>
Boston	11,636	9,892	5,883	10,461	11,538
NYNJ	324,559	349,658	382,074	382,912	301,123
Philadelphia	30,422	28,020	30,096	24,667	19,093
Maryland	42,676	42,058	36,154	47,148	38,915
Virginia	128,419	123,179	141,617	125,214	103,410
South Carolina	98,115	99,380	127,081	93,369	82,785
Georgia	211,056	219,089	236,991	234,583	173,863
Jaxport	26,186	27,694	24,469	27,027	27,390
Port Everglades	26,279	27,560	34,238	26,280	26,959
Miami	42,851	43,593	37,943	45,816	37,763
<b>USEC Total</b>	<b>942,199</b>	<b>970,123</b>	<b>1,056,546</b>	<b>1,017,477</b>	<b>822,839</b>
New Orleans	9,876	7,799	9,361	10,915	10,155
Houston	137,631	164,619	152,508	122,475	101,494
<b>USGC</b>	<b>147,507</b>	<b>172,418</b>	<b>161,869</b>	<b>133,390</b>	<b>111,649</b>
Vancouver	147,684	139,767	125,215	162,436	123,918
Prince Rupert	31,328	37,030	34,423	51,272	58,181
<b>British Columbia Total</b>	<b>179,012</b>	<b>176,797</b>	<b>159,638</b>	<b>213,708</b>	<b>182,099</b>
<b>U.S. Totals</b>	<b>2,003,771</b>	<b>1,881,241</b>	<b>2,142,635</b>	<b>2,161,540</b>	<b>1,781,967</b>

Source Individual Ports



## November 2023 TEU Numbers

Continued

ports, a considerable bump from their 39.3% share a year earlier. U.S. East Coast ports meanwhile worked 47.0% of the nation's inbound loads in November, down from a 51.6% share the previous November. Our two U.S. Gulf Coast ports held a 7.4% share of all inbound loads in November, down from their 9.2% share a year earlier but up from a 6.3% share of November 2019's inbound loads.

Although we survey four more ports than the National Retail Federation's Global Port Tracker does, our numbers normally are roughly consistent with theirs. In a January 8 press release, the NRF/GPT reported that November had seen the arrival of 1.89 million TEUs of inbound loads at the thirteen U.S. seaports it monitors. Our tally for November, based on what the ports say, shows those same thirteen ports reporting 1,893,607 inbound loads in November.

**Exhibit 2** reveals that 980,773 outbound loads left U.S. ports in November, a year-over-year gain of just 1.8% and a decline of 9.5% from the 1,083,875 outbound loads U.S. ports shipped in November 2019. U.S. East Coast ports accounted for 51.9% of all outbound loads this past November against a 34.3% share for U.S. West Coast ports and an 13.8% share for Gulf Coast ports.

## Container Contents Weights and Values

The figures in **Exhibits 4 and 5** represent the USWC shares of the nation's box trade at mainland U.S. ports. We have tweaked the exhibits to provide a broader historical context by showing how the numbers this November

### Exhibit 2 November 2023 Outbound Loaded TEUs at Selected Ports

	Nov 2023	Nov 2022	Nov 2021	Nov 2020	Nov 2019
Los Angeles	111,755	90,116	82,741	130,976	138,545
Long Beach	108,798	124,988	109,821	117,283	123,705
<b>San Pedro Bay Totals</b>	<b>220,553</b>	<b>215,104</b>	<b>192,562</b>	<b>248,259</b>	<b>262,250</b>
Oakland	61,390	63,283	72,155	79,667	81,780
NWSA	51,537	48,931	59,341	72,746	73,589
Hueneme	2,594	4,008	3,836	1,318	1,181
San Diego	478	706	652	450	272
<b>USWC Totals</b>	<b>336,552</b>	<b>332,032</b>	<b>328,546</b>	<b>402,440</b>	<b>419,072</b>
Boston	6,313	3,362	4,560	6,298	6,128
NYNJ	111,743	110,111	118,155	118,762	119,422
Philadelphia	6,108	7,588	8,247	5,639	6,406
Maryland	20,349	19,634	19,694	21,032	20,254
Virginia	101,628	92,988	84,002	89,032	77,241
South Carolina	59,397	56,283	67,639	64,447	62,831
Georgia	107,623	108,577	102,508	113,357	119,126
Jaxport	40,230	43,785	46,961	43,814	44,440
Port Everglades	34,229	32,213	31,605	31,476	39,665
Miami	21,110	22,627	37,943	45,816	37,763
<b>USEC Totals</b>	<b>508,730</b>	<b>497,168</b>	<b>521,314</b>	<b>539,673</b>	<b>533,276</b>
New Orleans	19,095	16,008	18,818	22,781	23,600
Houston	116,396	118,187	94,409	102,755	107,927
<b>USGC Totals</b>	<b>135,491</b>	<b>134,195</b>	<b>113,227</b>	<b>125,536</b>	<b>131,527</b>
Vancouver	65,757	66,167	55,702	82,062	91,707
Prince Rupert	10,351	9,263	8,375	12,949	15,250
<b>British Columbia Totals</b>	<b>76,108</b>	<b>75,430</b>	<b>64,077</b>	<b>95,011</b>	<b>106,957</b>
<b>U.S. Totals</b>	<b>980,773</b>	<b>963,395</b>	<b>963,087</b>	<b>1,067,649</b>	<b>1,083,875</b>

Source Individual Ports



## Exhibit 3 November 2023 YTD Total TEUs

	Nov 2023	Nov 2022	Nov 2021	Nov 2020	Nov 2019
Los Angeles	7,887,162	9,182,286	9,891,020	8,334,212	8,590,884
Long Beach	7,308,848	8,589,555	8,630,054	7,297,432	6,862,307
NYNJ	7,176,126	8,880,653	8,215,176	6,876,744	6,886,388
Georgia	4,505,367	5,451,374	5,145,213	4,234,732	4,238,344
Houston	3,499,580	3,682,874	3,150,062	2,724,721	2,736,345
Virginia	3,019,439	3,429,266	3,197,305	2,553,014	2,713,061
Vancouver	2,852,236	3,350,283	3,424,335	3,146,221	3,126,993
NWSA	2,711,245	3,152,217	3,482,104	3,018,564	3,490,851
South Carolina	2,272,586	2,572,964	2,505,297	2,100,390	2,248,305
Oakland	1,889,697	2,174,580	2,278,903	2,253,550	2,306,497
Montreal	1,402,608	1,596,749	1,585,465	1,467,501	1,609,901
JaxPort	1,189,496	1,217,060	1,269,568	1,295,289	1,235,362
Maryland	1,028,583	980,181	926,584	961,599	991,781
Miami	997,193	1,090,902	1,133,589	971,032	1,049,363
Port Everglades	921,265	1,002,908	973,677	848,303	949,196
Philadelphia	680,008	701,401	676,373	583,162	549,825
Prince Rupert	646,222	948,877	945,947	1,031,304	1,103,678
New Orleans	444,051	398,260	451,420	523,081	586,218
Hueneme	220,993	244,662	199,937	154,010	109,594
Boston	216,337	155,554	176,717	242,984	277,217
San Diego	138,894	148,586	146,015	136,377	129,504
Portland, Oregon	109,097	156,140	93,075	49,826	26
Everett (WA)	10,920	22,120	17,494	3,517.00	4,753.00

Source Individual Ports

## Exhibit 4 Major USWC Ports Shares of U.S. Mainland Ports Worldwide Container Trade, November 2023

		Nov 2023	Nov 2022	Nov 2019	Nov 2013
<b>Import Tonnage</b>	<b>USWC</b>	<b>37.1%</b>	<b>30.4%</b>	<b>37.7%</b>	<b>44.2%</b>
	LA/LB	27.1%	21.3%	27.2%	32.1%
	OAK.	3.2%	3.4%	3.9%	4.4%
	NWSA	4.4%	4.0%	5.1%	6.1%
<b>Import Value</b>	<b>USWC</b>	<b>41.5%</b>	<b>36.0%</b>	<b>45.8%</b>	<b>52.2%</b>
	LA/LB	32.3%	27.4%	33.7%	41.0%
	OAK.	2.9%	2.7%	3.8%	3.8%
	NWSA	5.3%	4.7%	6.9%	7.6%
<b>Export Tonnage</b>	<b>USWC</b>	<b>35.3%</b>	<b>34.4%</b>	<b>36.6%</b>	<b>43.7%</b>
	LA/LB	21.5%	20.9%	20.2%	27.0%
	OAK.	5.3%	5.9%	6.6%	6.3%
	NWSA	7.5%	6.4%	8.5%	9.3%
<b>Export Value</b>	<b>USWC</b>	<b>28.6%</b>	<b>28.5%</b>	<b>34.1%</b>	<b>38.3%</b>
	LA/LB	18.5%	18.0%	20.4%	25.2%
	OAK.	5.6%	5.7%	8.2%	7.0%
	NWSA	3.5%	3.6%	5.0%	5.5%

Source: U.S. Commerce Department

## Exhibit 5 Major USWC Ports Shares of U.S. Mainland Ports Containerized Trade with East Asia, November 2023

		Nov 2023	Nov 2022	Nov 2019	Nov 2013
<b>Import Tonnage</b>	<b>USWC</b>	<b>55.5%</b>	<b>47.9%</b>	<b>57.2%</b>	<b>68.2%</b>
	LA/LB	44.3%	36.4%	44.0%	51.6%
	OAK.	3.7%	3.7%	4.5%	5.1%
	NWSA	6.7%	6.6%	7.7%	9.7%
<b>Import Value</b>	<b>USWC</b>	<b>61.9%</b>	<b>54.4%</b>	<b>66.3%</b>	<b>75.5%</b>
	LA/LB	49.4%	42.9%	51.3%	59.2%
	OAK.	3.5%	3.1%	4.3%	4.4%
	NWSA	7.9%	7.2%	10.1%	11.0%
<b>Export Tonnage</b>	<b>USWC</b>	<b>55.4%</b>	<b>56.6%</b>	<b>59.2%</b>	<b>66.1%</b>
	LA/LB	35.2%	35.6%	35.0%	43.1%
	OAK.	7.0%	8.3%	9.4%	8.3%
	NWSA	12.2%	11.2%	14.6%	13.7%
<b>Export Value</b>	<b>USWC</b>	<b>58.3%</b>	<b>57.1%</b>	<b>65.3%</b>	<b>70.2%</b>
	LA/LB	38.6%	37.2%	41.3%	48.3%
	OAK.	9.8%	9.8%	13.2%	11.2%
	NWSA	7.9%	8.3%	10.2%	9.8%

Source: U.S. Commerce Department



### November 2023 TEU Numbers

Continued

compared with the same month a year earlier as well as in pre-pandemic November 2019 and a decade earlier in November 2013.

Other than the Port of Oakland, the major U.S. West Coast ports saw improvements in their shares of the nation's containerized export tonnage. Compared with November 2019, the share of import tonnage passing through the Ports of Los Angeles and Long Beach was almost identical to their pre-pandemic share.

As **Exhibit 5** shows, the Ports of LA and Long Beach handled slightly higher shares of the nation's containerized import and export tonnage in November than the two ports had handled in November 2019.

**Exhibit 6 and Exhibit 7** track overall USWC inbound and outbound shares through the last thirteen months.

#### Anything Sound Familiar?

"A severe drought in Panama has resulted in lower water levels in the Panama Canal, forcing some shippers to limit the amount of cargo their largest ships carry so they can safely navigate the waterway."

That's what *The New York Times* reported under the headline "What Panama's Worst Drought Means for Its Canal's Future" ... nearly five years ago, on May 17, 2019.

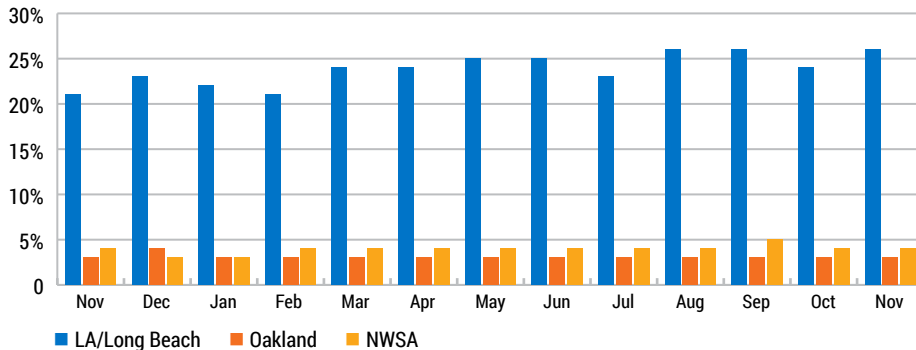
#### Fourth Coast Traffic

According to a report in *Progressive Farmer*, a new record was set when the *Nordika Desgagnes*, a Canadian-flagged ocean-going vessel (known thereabouts as a "saltie") sailed out of the Port of Duluth on December

#### Exhibit 6

### Major USWC Ports Shares of Recent U.S. Containerized Import Tonnage

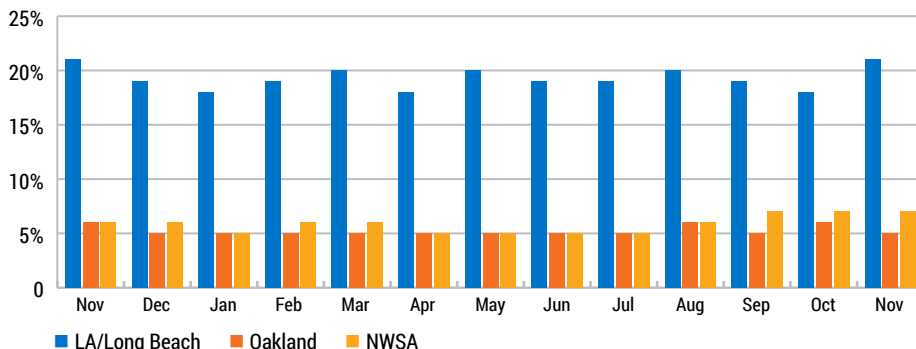
Source: U.S. Commerce Department



#### Exhibit 7

### Recent Trends in Major USWC Ports' Shares of U.S. Containerized Export Tonnage

Source: U.S. Commerce Department



29. That made it the latest departing vessel to leave the Lake Superior marine terminal before the St. Lawrence Seaway iced up for the winter.

"Combined with the earliest oceangoing arrival in port history—the Federal Dart arrived March 28, 2023—the *Nordika Desgagnes* departure on Dec. 29 will make this navigation season Duluth-Superior's longest ever for international traffic (277 days)," noted Jayson Hron, director of communication and marketing, Duluth Seaway Port Authority, in a press release.

The ship left just in time. In November, St. Lawrence Seaway management approved its latest seasonal closure ever, Jan. 5, 2024. One year earlier, it had been touch-and-go for a saltie that had departed Duluth on December 22 just as a fierce winter storm slowed the ship's progress and fears arose that it would be stranded. Fortunately, conditions eased up, and the vessel was able to deliver its cargo of durum wheat to Bari, Italy. (Ponder that provenance the next time you're buying "genuine" Italian-made pasta.)



## November 2023 TEU Numbers

Continued

### Alfalfa and Hay Exports

We suppose there are people who know the difference between alfalfa and hay. We are not among them. However, the distinction (if any) came to mind while we were reading a recent *New York Times* article about how Southwestern states like Arizona are adapting to record-high summer temperatures and record-low water supplies. (Last summer, daytime highs reached or exceeded 110 degrees Fahrenheit for 31 straight days in Phoenix, the country's fifth most populous city.)

One step has been to reduce water allocations to farmers growing forage crops used chiefly to feed livestock and, to some lesser extent, thoroughbred horses owned by wealthy racehorse breeders in the Middle East. Saudi Arabia banned growing alfalfa and other green fodder crops within its own borders in 2018 in a bid to relieve pressure on the kingdom's water resources.

The *Times* cited research published in Nature Sustainability claiming

that "70 percent of the water used by farmers to irrigate crops goes to growers of alfalfa, hay, corn silage, and other grasses that are used to fatten up cattle for beef and cows for dairy".

Arizona is moving to terminate a lease held by Saudi-owned Fondomonte Arizona, a major grower of alfalfa. Arizona has been charging the company \$25 per acre for its lease on state land. Like other companies that lease state land in Arizona, Fondomonte can pump unlimited amounts of water from wells at no cost.

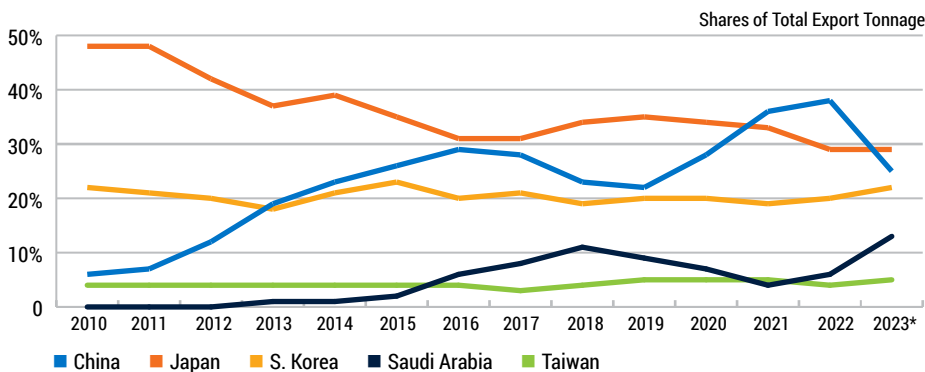
Fondomonte is a subsidiary of the Saudi dairy company Almarai, which also grows alfalfa on 3,375 acres of farmland near Blythe, where it pays the Palo Verde Irrigation District a flat rate for Colorado River water to irrigate its alfalfa fields, according to an October 5 report in the *Los Angeles Times*.

A legal confrontation between the State of Arizona and the company is likely to ensue, with major implications not just for foreign companies with investments in America's natural resources but also for the future of agriculture as drought intensifies in the Southwest and cities clamor for rural water reserves.

The Fondomonte controversy is a bit odd, given that over three-quarters of U.S. alfalfa exports go to China, Japan, and South Korea. Last year (that would be 2023 for those slow to turn the pages of the calendar), Saudi Arabia accounted for a 12.5% share of export tonnage. However, a cluster of other Middle Eastern countries

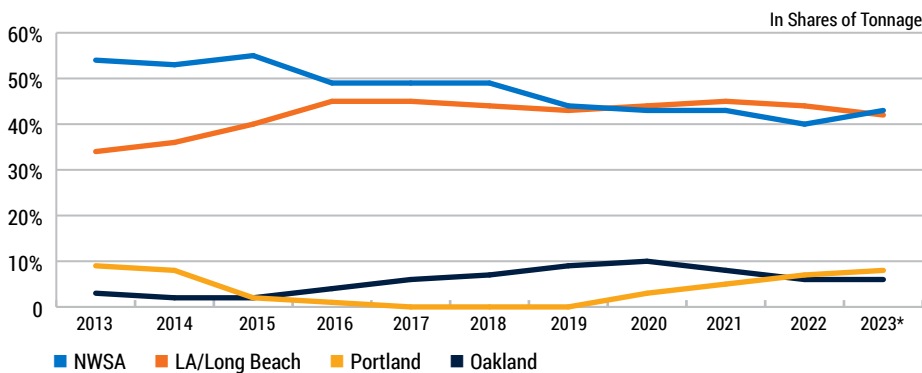
### Exhibit 8 Leading Overseas Markets for U.S. Exports of Forage Products

Source: U.S. Commerce Department



### Exhibit 9 Leading U.S. Ports for Containerized Forage Products Exports

Source: U.S. Commerce Department





### November 2023 TEU Numbers

Continued

(Qatar, the United Arab Emirates, Oman, Kuwait, and Jordan) held a 6.5% share.

As **Exhibit 9** makes manifest, nearly all of America’s containerized exports of forage products (by tonnage) moves out through U.S. West Coast seaports, with the San Pedro Bay ports contesting the trade with the ports of the Northwest Seaport Alliance. Through November of 2023, the two port complexes handling 84.6% of all export tonnage. The Ports of Oakland and Portland (Oregon) currently handle nearly 15% of the export tonnage.

### Finally, The Metacarcinus Magister May Be Getting Its Due

Existing California law designates, among other things, the golden poppy as the official state flower, the California redwood as the official state tree, and the California gray whale as the official state marine mammal. Now, a new bill (Assembly Bill 1797) introduced on January 4 in the State Legislature would establish the Dungeness crab (Metacarcinus Magister) as the official state crustacean.

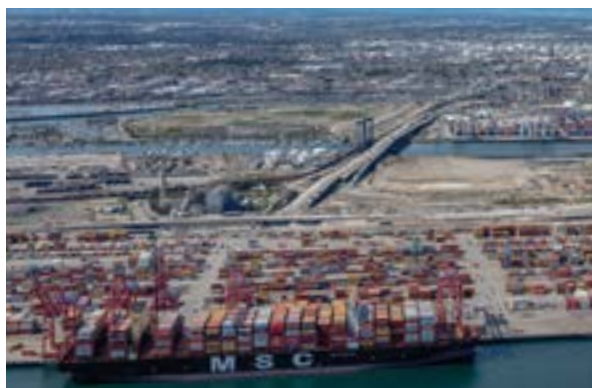
It’s hard to think how this new honor would affect the public image of something as iconic as the Dungeness crab. It is already Oregon’s state crustacean, and it is annually feted at the Dungeness Crab and Seafood Festival in Port Angeles, Washington. For the record, the crab’s name comes from the Dungeness Spit, which shelters Dungeness Bay in the Dungeness National Wildlife Refuge up in Washington State.

We’ll wait to see if the new bill merits any commentary from the California Department of Fish and Wildlife. For the last five years, the agency has been routinely delaying the start of the commercial harvesting season beyond its historical start on November 15 to protect humpback whales from becoming entangled in fishing gear during their winter migration along the California coast. During the 2015-2016 season, the Center for Biological Diversity sued the state agency on behalf of the whales. That led to a 2019 settlement which has since pushed the effective date of harvesting in California waters past the holidays.



As a result, Californians looking to feature Dungeness crabs on their dinner tables between Thanksgiving and New Year’s must be content with buying months-old frozen crabs or expensive fresh crabs imported from Oregon and Washington State.

Even for a legislative body that has displayed a unique talent for exploiting seemingly mundane issues for partisan advantage, we don’t expect the folks at the State Capitol to get too steamed up about AB 1797. We could be wrong, though.



## Speed and Service

Expanding rail and digital infrastructure will improve speed to market.



Port of **LONG BEACH**  
THE PORT OF CHOICE



JOCK O'CONNELL'S COMMENTARY

# Flux in the Recyclable Export Trade

For all the media attention lavished on containerized imports, especially now when shipping through both the Panama and Suez Canals is under stress, we don't hear nearly as much about what – apart from air – is in the boxes that do sail from our shores. That leaves a lot of room for speculation about containerized exports.

In 2022, some 239,571,000 short tons of merchandise arrived in containers at U.S. ports. There were a lot of consumer products in these boxes as well as capital goods and industrial supplies. By contrast, containerized exports totaled 123,024,629 short tons in 2022. What was in those containers? Readers of my commentaries may recall a piece I wrote several months ago about how much of what we export in containers are items generated by farmyards and junkyards.

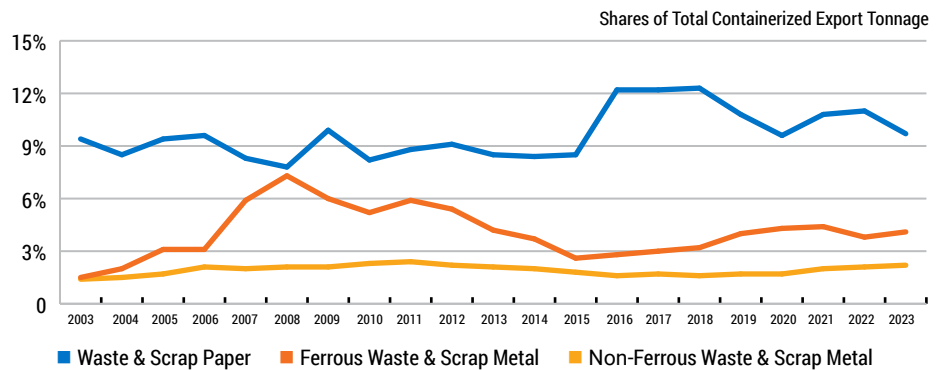
So, to start the year, I thought I would delve further, with some help by CalRecycle, the State of California's waste disposal agency, into the solid waste materials U.S. West Coast ports ship abroad in containers.

Nationally, waste and scrap materials account for about one-fifth of the containerized tonnage exported from U.S. seaports. The three most prominent categories of waste and scrap exports have been: Waste & Scrap Paper (HS Code 4707); Ferrous Metal Waste & Scrap (HS 7204); and Non-Ferrous Metal Waste & Scrap (chiefly HS 7602 and HS 7404). Together, their share of the country's oceanborne containerized export trade over the past twenty years has ranged

Exhibit A

### Scrap in America's Containerized Export Trade

Source: U.S. Commerce Department



from 12.0% in 2004 to a high of 18.0% in 2009. Most recently, it hit 17.2% in 2021 before sliding to 16.0% in the just concluded year of 2023. The next largest category of exported scrap, Worn Clothing (HS 6309), generally accounts for a half percent of U.S. containerized export tonnage.

Until 2023, the nation's leading export commodity by tonnage had been Waste & Scrap Paper. Owing to a 15.4% year-over-year fall-off in export tonnage last year when a 29.5% year-over-year surge in containerized export tonnage of Polymers of Ethylene (HS 3901), scrap paper ceded the top spot to the polymers but still accounted for a 9.7% share of all containerized export tonnage.

While U.S. West Coast (USWC) ports do handle a small portion of the nation's polymer export trade (4.5% last year), Port Houston dominates the trade with a 70.9% share in 2023. That means that Waste & Scrap Paper

continues to loom largest in the containerized exports of California.

Indeed, 14.7% of all containerized export tonnage in 2023 from the Ports of Los Angeles and Long Beach were Waste and Scrap Paper, while Ferrous Metal Waste & Scrap and Non-Ferrous Metal Waste & Scrap held 6.9% and 2.6% shares, respectively. Last year, some 63,335 short tons of Worn Clothing were also shipped from the San Pedro Bay ports, accounting for 0.3% of the ports' containerized export tonnage year and down substantially from the 92,133 short tons of Worn Clothing shipped from the ports in pre-pandemic 2019. Waste Paring & Scrap of Plastics (HS 3915), which amounted to as high as 847,740 short tons in 2014 when it accounted for 3.0% of all contained tonnage leaving the two ports, totaled a mere 23,631 short tons of exports in 2022 and has fallen in the first eleven months of 2023 by 20.7% from the same period in 2022.





## Commentary

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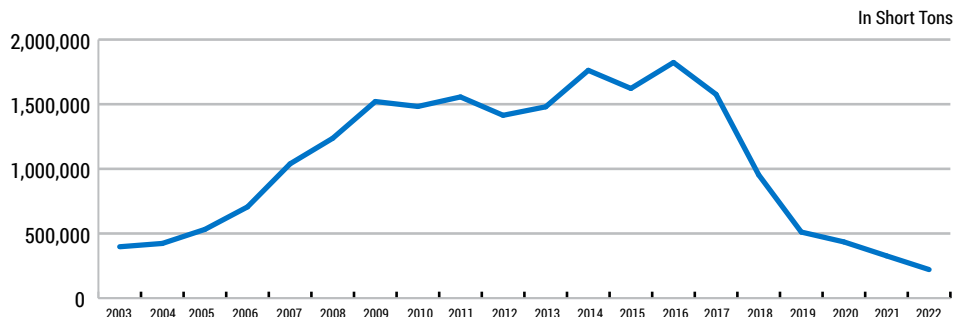
At the Port of Oakland, Waste & Scrap Paper continues to be the largest contributor to the port's containerized export tonnage. In 2023, with a 25.3% share of all outbound tonnage, down slightly from 25.8% the year before, and from a peak of 27.0% in 2018. Ferrous Metal Waste & Scrap jumped to an 8.1% share last year from a 5.9% share in 2022. Non-Ferrous Metal Waste & Scrap shipments held a 2.8% share of Oakland's export tonnage last year, a bit higher than its share in recent years. 19,461 short tons of Worn Clothing were also shipped from the East Bay port in 2023, well below the 29,060 tons exported in pre-pandemic 2019. Containerized exports of plastic waste, which supplied as much as 178,294 short tons of cargo in 2014, plummeted to 6,397 short tons in 2020 and declined by 34.15% through November of 2023.

Up in Washington State, at the Northwest Seaport Alliance Ports of Tacoma and Seattle, waste and scrap goods represent smaller shares of the containerized export trade. Waste & Scrap Paper last year accounted for a 4.8% share, down from 5.4% a year earlier, and from a high of 9.2% in 2017. Ferrous Waste a& Scrap tonnage plunger 64.3% in 2023, leaving it with a slender 0.8% share of the NWSA containerized export tonnage, down from 2.2% the preceding year. Shipments of Non-Ferrous Waste & Scrap held steady with a 2.2% share of the NWSA's containerized export tonnage both this year and in 2022. Exports of Worn Clothing (23,425 short tons) constituted just 0.4% of last year's outbound box trade tonnage. The peak for Worn Clothing exports from the NWSA ports was

### Exhibit B

### Volatility in Containerized U.S. Exports of Plastic Waste

Source: U.S. Commerce Department



41,939 short tons in 2018. Plastic waste, which yielded 118,901 short tons of containerized exports at the NWSA ports in 2016, last year produced just 1,797 short tons.

Of the three West Coast states, California keeps the sharpest eye on its foreign shipments of recyclable goods. The California Department of Resources Recycling and Recovery (CalRecycle) publishes an annual "State of Disposal and Recycling Report". The latest issue was released in December 2022 and features statistics from 2021. The trade data collected by similar agencies in Oregon and Washington State include shipments of waste to other states in their definitions of exports.

As the following exhibits indicate, it has been a volatile trade driven on the supply side by the unrivaled American propensity for generating waste and resisted by a spreading unwillingness of other countries to accept the waste products we've been stuffing in containers. As a result, volumes of exports are likely to diminish even as destinations shift to markets less squeamish about the contents of the containers they unpack. As we shall

see below, plastic scraps used to be big but are now no longer in high demand abroad.

CalRecycle estimates that California's 39.3 million residents and 1.7 million businesses generated about 76.7 million short tons in 2021. Of that total waste generation, 46 million short tons went to domestic disposal and disposal-related activities, including about 41.5 million short tons sent to landfills. This equates to a statewide per capita disposal rate of 6.4 pounds per person per day. Of the total amount disposed, over 920,000 short tons was debris from disaster areas, up from 160,000 short tons in 2020.

In addition to the about 54% of total materials that were sent to landfills, around 16% were exported as recyclables, an estimated 12% were composted, anaerobically digested, or mulched, and another 12% were locally recycled, or source reduced. The remainder of the material, less than 6%, went to alternative daily cover (ADC), beneficial reuse, transformation, alternative intermediate cover (AIC), waste-tire derived fuel, and engineered municipal solid waste (EMSW).



**Commentary**

Continued

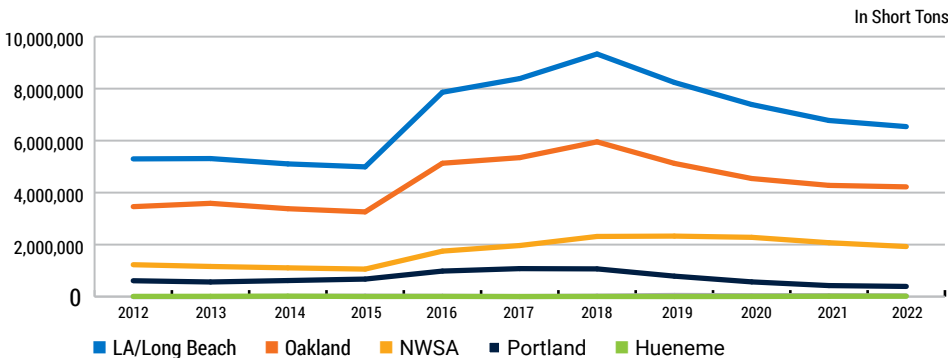
Perhaps surprisingly, the commercial sector was the source of 48% of disposed material, followed by residential (32%), and then “self-haul” sources (20%). Compared to 2020, disposal decreased in both the commercial and residential sectors. Recent increases in the incidence of wildfires and severe weather conditions have generated a surge in what CalRecycle terms “Disaster Debris”. Based on data CalRecycle has collected through the Recycling and Disposal Reporting System (RDRS), the total amount of disaster debris, including structural debris and hazard trees, disposed of in California totaled over 900,000 tons in 2021, up from less than 200,000 tons in 2020

CalRecycle estimates that ocean-borne export of recyclable materials accounted for about 12.2 million short tons in 2021, a decrease of approximately 1 million short tons from 2020. Despite the decline, sea-borne exports of recyclable materials remained the largest destination for statewide recycling. CalRecycle also has begun estimating the amount of scrap plastics exported via truck and rail to Mexico and Canada, with Mexico in 2021 the largest importer of scrap plastics from California, receiving more than 43,000 short tons via truck and rail.

Based on the 2021 data, 12.2 million short tons of recyclable materials were exported from California ports to international markets. Compared to 2020, the tonnage decreased by 9% in 2021 by over one million short tons. Recyclable materials exported from California ports had a vessel value of about \$5.9 billion. So, despite

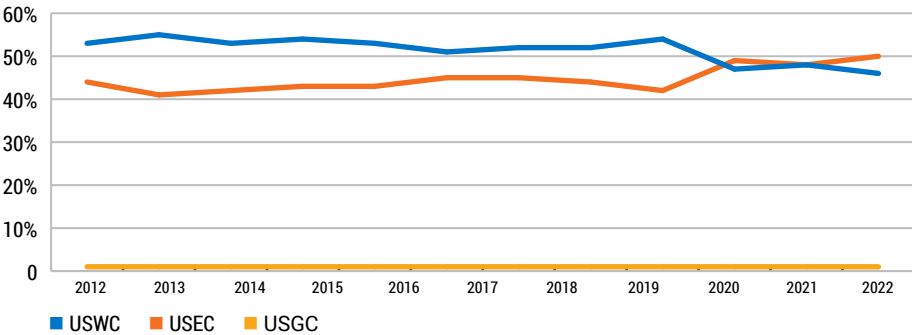
**Exhibit C USWC Ports Containerized Exports of Recyclable Paper**

Source: U.S. Commerce Department



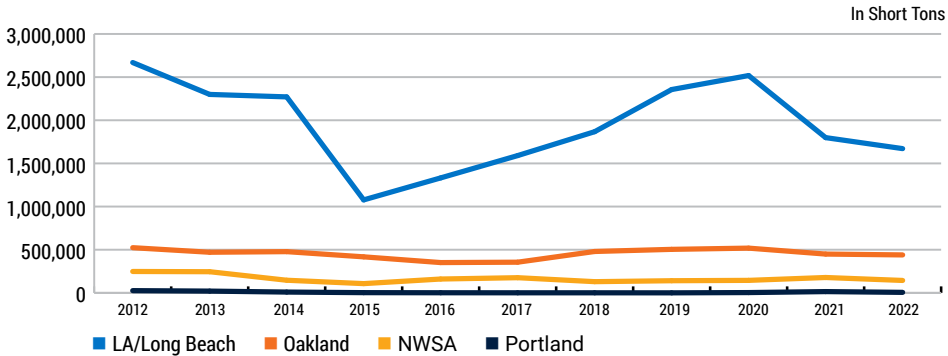
**Exhibit D Coastal Shares of Oceanborne Containerized Exports of Recyclable Paper**

Source: U.S. Commerce Department



**Exhibit E USWC Ports Exports of Containerized Ferrous Metals**

Source: U.S. Commerce Department





## Commentary

Continued

the reduction in tonnage exported, the total vessel value increased by about \$1.4 billion compared to 2020.

The three countries importing the most recyclable materials from California in 2021 were, in order of greatest tonnage: Taiwan, Vietnam, and Thailand. From 2000 to 2020, China had been the largest importer of California's recyclable materials. But, in 2021, China fell to seventh place among the largest importers. The volume of recyclable materials imported by China has been steadily decreasing since 2011, when China imported about 5% of all seaborne recyclable materials by weight and 15% by vessel value.

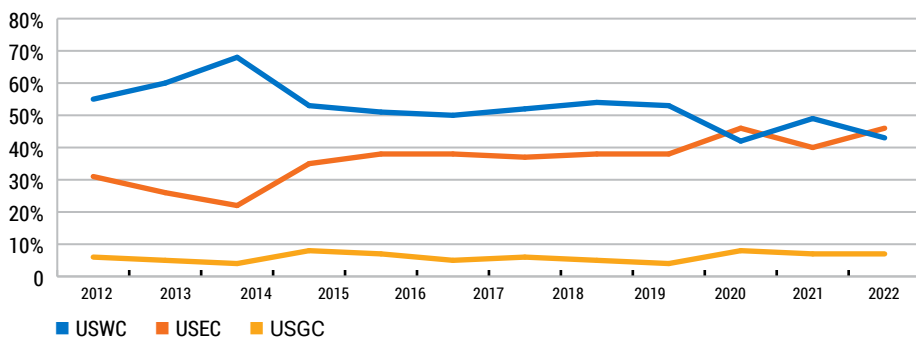
CalRecycle devised its own classifications of recyclable materials. The five recyclable material categories with the most weight exported from California in 2021 were OCC (Old Cardboard Containers) and Kraft Paper; Ferrous Metal; Non-Ferrous Metal; Unsorted Mixed Paper; and Other Miscellaneous Paper. The five most valuable exported recyclable material types by vessel value were: Non-Ferrous Metal; Ferrous Metal; OCC and Kraft Paper; Worn Clothing; and Other Miscellaneous Paper. (Kraft paper, by the way, is paper or paperboard, usually light brown in color, that is widely used in packaging.)

International trade and environmental policies influence where waste materials are sent. As countries adopt new policies and restrictions, the movement of California's recyclable materials may shift. Exports of recyclable materials to China have been decreasing for the past decade,

### Exhibit F

#### Coastal Shares of Containerized Ferrous Waste Exports

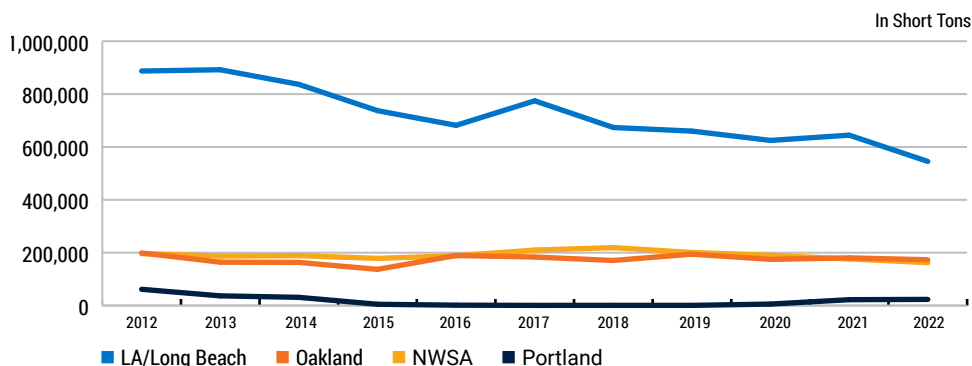
Source: U.S. Commerce Department



### Exhibit G

#### USWC Exports of Containerized Non-Ferrous Metals

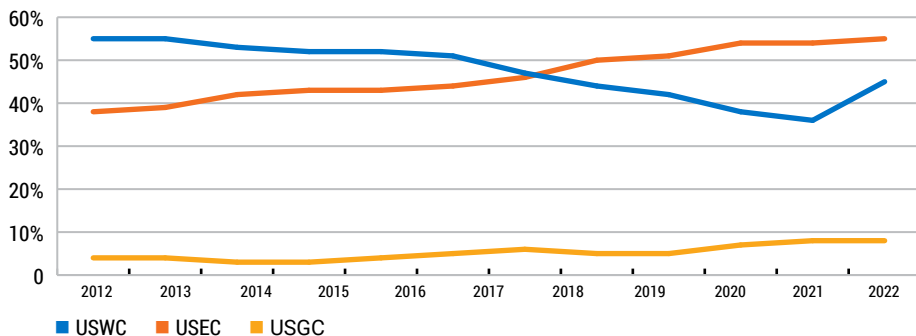
Source: U.S. Commerce Department



### Exhibit H

#### Coastal Shares of Containerized Exports of Non-Ferrous Metals

Source: U.S. Commerce Department





## Commentary

Continued

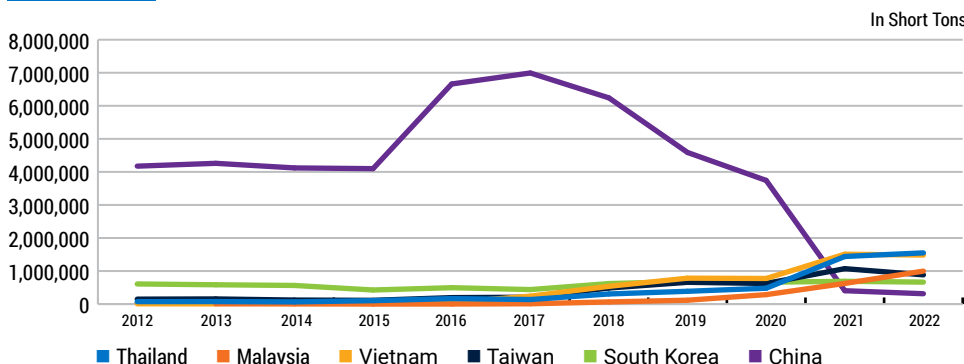
largely as a result of China’s Green Fence and National Sword policies. In 2021—for the first time in many years—China was not one of the top five countries importing recyclable materials from California. In contrast to the more than 13 million tons of recyclable material imported by China in 2011, China imported less than one million tons in 2021, according to CalRecycle.

The issue of contamination and import restrictions are especially important for plastics and plastic contamination, causing significant decreases in the amount of plastic scrap exported by California. In 2021, California exported less than 100,000 short tons of plastic scrap, compared to almost 1.3 million tons in 2014. That volume has continued to fall. **Exhibit B** dramatizes the path that containerized exports of plastic waste materials have taken over the past two decades. Especially noteworthy is the 87.9% plunge in the overseas trade from its peak of 1,822,671 short tons in 2016 to just 220,903 short tons in 2022. Through the first eleven months of 2023, the trade slipped a further 14.0% from the same months in 2022.

**Exhibits C-K** are based on official export statistics collected by the Foreign Trade Division of the U.S. Census Bureau in the U.S. Department of Commerce and are intended to illustrate how USWC ports have been faring with containerized exports of waste & scrap materials. Because of classification distinctions, these charts may not match those used in reports from CalRecycle, although the source of the data remains the same.

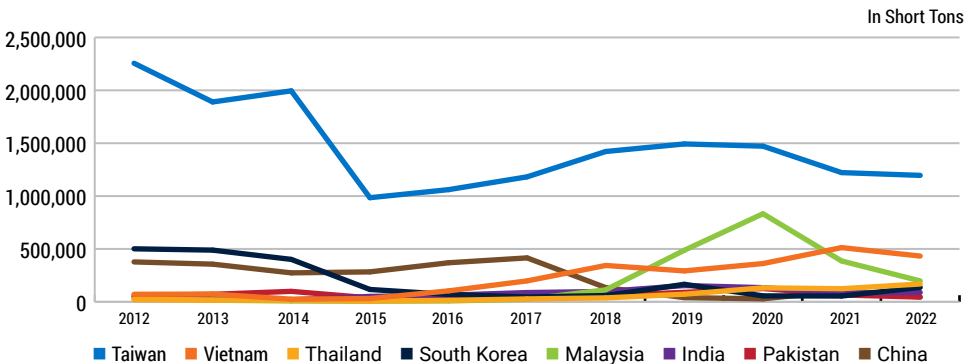
### Exhibit I Leading Overseas Market for USWC Exports of Recyclable Paper

Source: U.S. Commerce Department



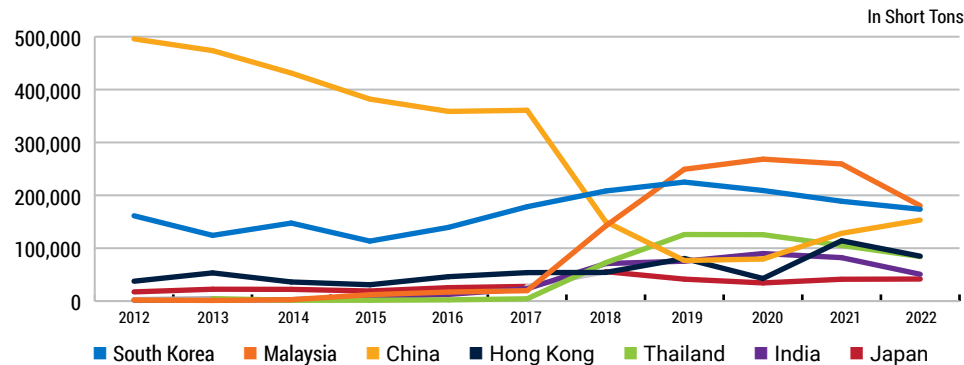
### Exhibit J Leading Overseas Market for USWC Exports of Recyclable Ferrous Metals

Source: U.S. Commerce Department



### Exhibit K Leading Overseas Market for USWC Exports of Recyclable Non-Ferrous Metals

Source: U.S. Commerce Department





PMSA COMMENTARY

# Navigating the Waves of Success: Port of Los Angeles Unveils Ambitious Plans and Economic Resilience in 9th Annual State of the Port Luncheon

By Natasha Villa, External Affairs Manager, Pacific Merchant Shipping Association

On January 10, 2024, in collaboration with the Port of Los Angeles, the Pacific Merchant Shipping Association hosted the 9th Annual State of the Port of Los Angeles Luncheon. This event featured Los Angeles Mayor Karen Bass and City Councilmember Tim McOsker, alongside the keynote speaker, Port of Los Angeles Executive Director Gene Seroka.

Mayor Bass spoke first, and touted the national importance of the Port of Los Angeles, emphasizing its economic significance and commitment to sustainable practices, noting that the Port of Los Angeles “is vital to the entire city, the entire state, and the entire country.” Mayor Bass pledged collaboration for zero-emission goals, and called for joint efforts to create job opportunities and promote marine sciences, urging collective action to transform the port into an opportunity engine for all. Perhaps most importantly, after acknowledging all of these challenges and the economic importance of seaport operations, Mayor Bass spoke directly to the maritime community and said, “at City Hall, we want you to know that we have your back.”

Executive Director Seroka gave his speech in front of a crowd of approximately 550 attendees. Mr. Seroka outlined ambitious plans for 2024,



“At City Hall, we want you to know that we have your back.”  
Los Angeles Mayor Karen Bass

focusing on community investment, environmental leadership, workforce development, and enhanced infrastructure to accommodate growing cargo demands. His speech also featured multiple videos that highlighted the Port’s commitment to environmental improvement, including the recent award of federal grants to help establish a new hydrogen hub at the Port.

In addition to the year ahead, Mr. Seroka emphasized that in 2023, the Port of Los Angeles maintained its status as the nation’s top container port for the 24th consecutive year. The Port finished 2023 handling 8,634,497 TEUs.

While this reflected a 13% decline from the previous year, Mr. Seroka highlighted a robust recovery in the past five months, coupled with an increase in market share stating that Port of Los Angeles’ “exports had the highest volume since 2020, up more than 7% year over year.” The Port also processed 763,262 TEUs in December 2023, a 19% improvement when compared to the same period in 2022.

Looking towards the future, Mr. Seroka stated that “our work in the



### PMSA Commentary

Continued

year ahead will entail moving forward on a number of fronts, all of which reflect how much we value our community, the environment, and the jobs and workforce that moves cargo through our Port.”

A big thank you to the Port of Los Angeles staff for their outstanding efforts in making this event possible. PMSA staff would also like to express gratitude to the event sponsors for their generous support. These contributions have been instrumental in the success of this event. Thanks to these sponsors, this event has raised more than a quarter of a million dollars for EXP and the International Seafarers Center.

“Our work in the year ahead will entail moving forward on a number of fronts, all of which reflect how much we value our community, the environment, and the jobs and workforce that moves cargo through our Port.”

**Port of Los Angeles Director of the Port Gene Seroka**



[Watch the entire 9th Annual State of the Port of Los Angeles address here.](#)

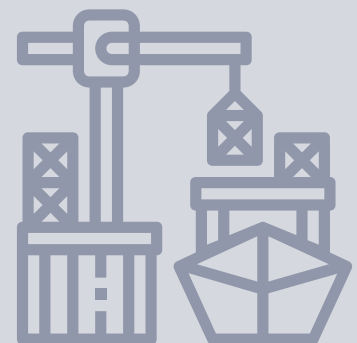
NUMBER OF THE MONTH

# 10,354,990

TOTAL NUMBER OF INBOUND LOADS THAT IN 2023 PASSED THROUGH THE SEVEN USWC PORTS WE MONITOR

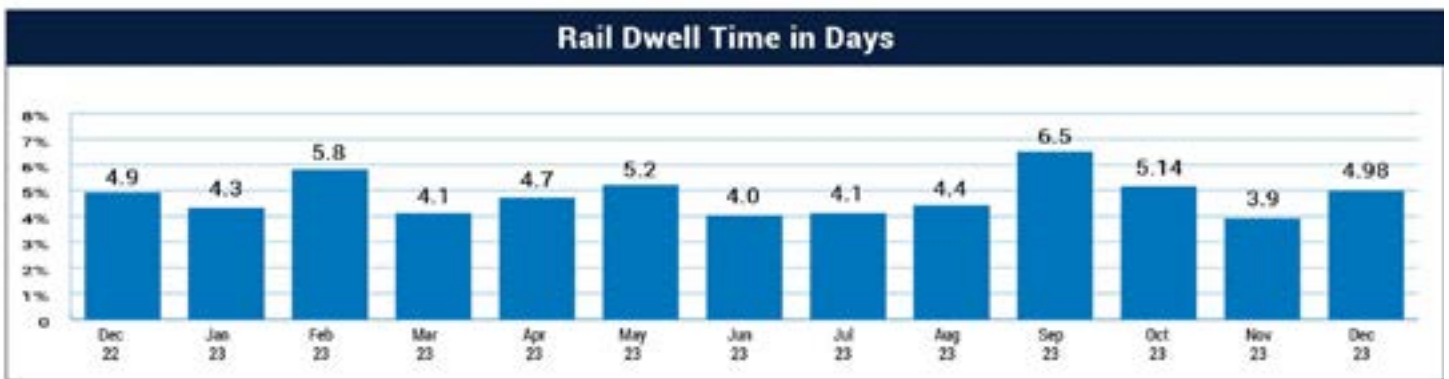
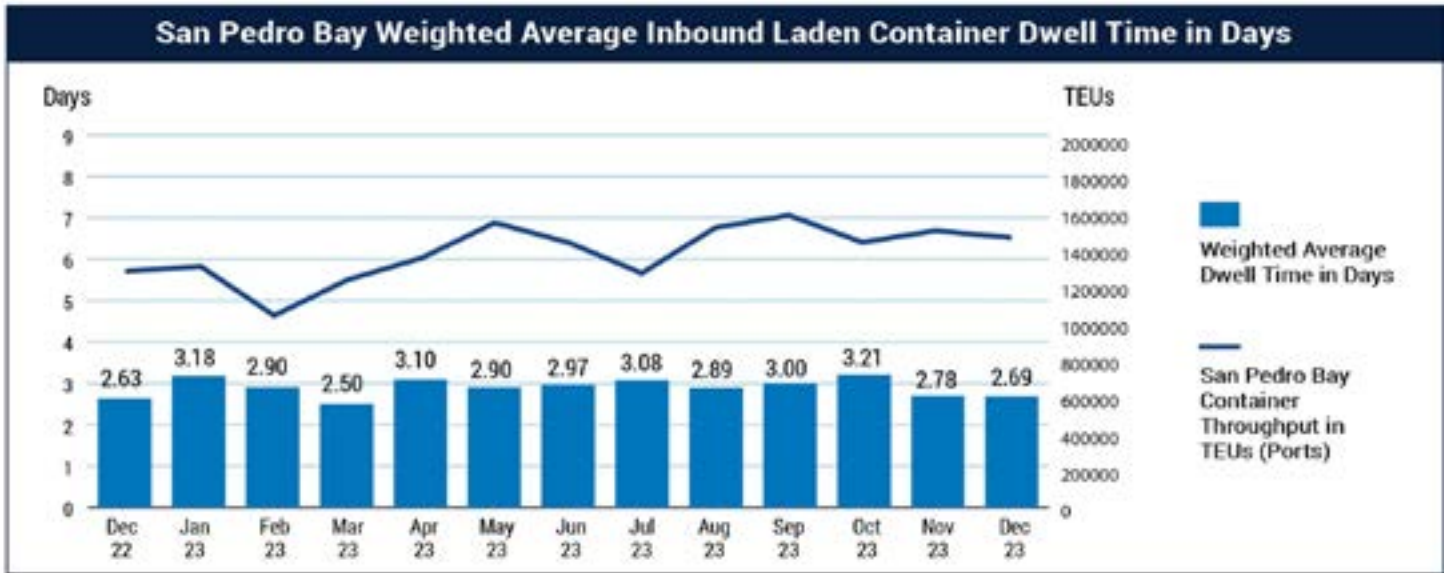
**Down 4.4% from 2019**

Source: Individual Ports





# San Pedro Bay Ports Truck Dwell Time remains Steady; Rail Dwell Time Increases for Month of December



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**State of Washington  
Pilotage Commission  
February 15, 2024**

**Grays Harbor District Report**

There were 10 arrivals in January: 5 dry bulkers, 3 liquid bulkers, 1 RoRo and 1 Logger. There were 22 pilot jobs in January.

In 2023 we ended with 91 arrivals: 60 dry bulkers, 19 liquid bulkers, 9 RoRo's and 3 Loggers. There were a total of 254 pilot jobs in 2023.

There are 10 vessels scheduled for February: 7 dry bulkers, 1 liquid bulkers and 2 RoRo's.

**Dredging**

A Pre-Dredge meeting, to be held with all the permitting agencies and the contractor, was held Friday, February 2<sup>nd</sup> at 9:30 AM. This is the final permitting requirement before dredging commences. Our amended Site Use Authorization was received in January, which was the last remaining document needed.

American Construction is planning to mobilize on February 11<sup>th</sup> and dredge until February 14<sup>th</sup>. Final movement of the dredge will be determined when it gets closer, all dependent on vessel traffic at Terminal 2. Pre-dredge survey is scheduled for early next week and post-dredge survey is planned immediately after the completion of dredging at both terminals.

**Man Model**

Pilot Captain Colby Grobschmit completed manned model training at the Port Ash Australia model training centre. This five-day course included exercises in scaled manned ship models as well as class time covering practical aspects of handling large vessels in all conditions.





# Board of Pilotage Commissioners – Tug Escort Rulemaking

Update

February 15, 2024



# Agenda

1. Rulemaking overview and scope
2. Summary of Workshops
3. Escort Ideas
4. Research to Consider
5. SEPA Process overview
6. Model Team Response to AWO
7. Next Steps



# Why are we doing this rule-making?

## ESHB 1578 required the following:

- Escorts in Rosario Strait and waters east for small oil tankers, Articulated Tug Barges (ATBs), and towed barges (codified in RCW 88.16).
- By December 31, 2025, BPC, in consultation with Ecology, adopt tug escorts rules for small oil tankers, ATBs, and towed barges in Puget Sound. This rule making must address the tug escort requirements in Rosario Strait and connected waters east and may adjust or suspend those requirements
- By October 1, 2028, and no less often than every ten years 10 thereafter, the BPC and Ecology consider the effects of these rules and determine whether an update is needed.

## Agency Coordination

### BPC and Ecology signed an [Interagency Agreement \(IAA\)](#) in 2020:

- BPC Role
  - ✓ Outreach lead
  - ✓ Government-to-government consultation
  - ✓ Final decisions on tug escort requirements
- Ecology Role
  - ✓ Rulemaking process
  - ✓ Technical expertise
  - ✓ Regulatory analysis
    - Administrative Procedures Act (APA)
    - State Environmental Policy Act (SEPA)
    - Regulatory Fairness Act (RFA)



# Scope

This rulemaking will amend [WAC 363-116-500](#):

- Describe tug escort requirements for the following vessels operating in the waters east of the line extending from Discovery Island light south to New Dungeness light and all points in the Puget Sound area:
  - ✓ Oil tankers of between five thousand and forty thousand deadweight tons.
  - ✓ Articulated tug barges (ATB) and towed waterborne vessels or barges greater than five thousand deadweight tons that are designed to transport oil in bulk internal to the hull.
- Specify operational requirements for tug escorts, where they are required.



# Scope Cont'd

## This rulemaking will amend [WAC 363-116-500](#):

- Consider the existing tug escort requirements applicable to Rosario Strait and connected waterways to the east, established in RCW 88.16.190(2)(a)(ii), including adjusting or suspending those requirements, as needed.
- Describe exemptions to tug escort requirements, including whether certain vessel types or geographic zones should be precluded from the escort requirements.
- Make other changes to clarify language and make any corrections needed.



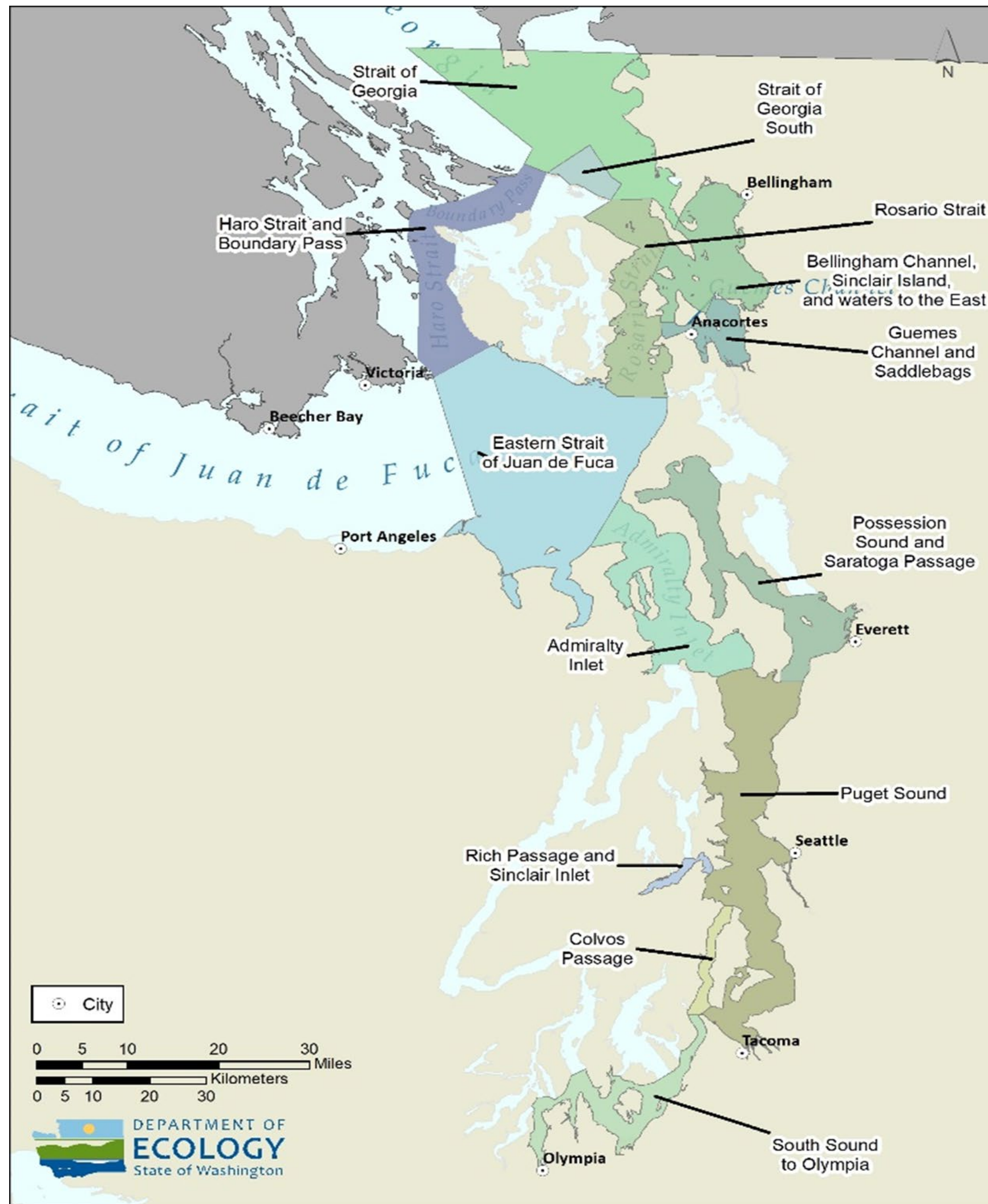
# BPC - Oil Transportation Safety Committee

OTSC

<b>Chair</b>	<b>BPC Ex- officio</b>	<b>* BPC Ecology</b>	<b>BPC Public</b>	<b>* Tribal</b>	<b>* Oil Industry</b>	<b>* Tug Industry</b>	<b>* Environ. Comm.</b>	<b>* Pilot</b>
<b>Jaimie Bever</b>	<b>Sheri Tonn</b>	<b>Nhi Irwin</b>	<b>Jason Hamilton</b>	<b>Senator Brian Porter</b>	<b>Antonio Machado</b>	<b>Jeff Slesinger</b>	<b>Fred Felleman</b>	<b>Blair Bouma</b>
<b>BPC</b>				<b>Swinomish</b>	<b>WSPA</b>	<b>Delphi Maritime</b>	<b>Friends of the Earth</b>	<b>Puget Sound Pilots</b>

\* OTSC members are encouraged to identify alternates to stand in for members and/or contribute as Subject Matter Experts to committee work. Each of these seats have multiple alternates that contribute to the OTSC on a regular basis.

# Zones



## Geographic Zones

(Study Area) as proposed by the OTSC and adopted by the Board July 6, 2020.





# Rule Inputs per ESHB 1578



## Workshop 1 Summary:

- Over 30 references are under review to inform this rulemaking including academic and research publications; pilotage documents; and Federal, State, and local regulations and reports..
- Decision Points include:
  - ✓ Which vessel types (small tankers, barges, ATBs) should be required to have escorts?
  - ✓ Which zones should the escort requirements apply in?
  - ✓ What capability requirements should escort tugs meet?
  - ✓ Should there be any exemptions?

## Workshop 2 Summary, Tug Capability Ideas:

- Propulsion – Further consideration
- Horsepower – Further consideration
- Bollard Pull – May not be a good fit
- Bollard Pull Testing – May not be a good fit
- Tethering – Further consideration
- Deck Fittings – Further consideration
- Escort Equipment – May not be a good fit
- Auxiliary Equipment – May not be a good fit
- Pre-escort Conference – Further consideration
- Certification – Further consideration
- Escort Provider Training & Drills – Further consideration



Workshop 3 Summary – **DECISION POINT Escort Alternative Ideas:**

1. Remove Rosario and waters east requirement  
(Pre – 2020 Escort Regime)
2. Maintain Rosario and waters east requirement  
– no other change (2023 Escort Regime)
- 2a: Maintain Rosario and waters east requirement  
for specific vessel types  
(2023 Escort Regime Targeted to Specific Vessel Types)
3. Escorts for Specific Vessel Types in Specific Zones
4. Escorts for ALL Vessel Types in ALL Zones

# Rulemaking References Examples

(Harbor Safety Committees, State & Federal Regulations)

1. [HSC Puget Sound Harbor Safety Plan](#)
2. [HSC San Francisco Harbor Safety Plan](#)
3. [HSC LA/LB C.3 History of Tug Escort Guidelines](#)
4. [California Code 14 851.23](#)
5. [Massachusetts Requirements for Tugboat Escorts fact sheet](#)
6. [33 CFR 168.50 \(b\)](#)
7. [Best Available Technology for Tanker Escorts \(pwsrcac.org\)](#)
8. [Tanker Escort System \(pwsrcac.org\)](#)
9. Oregon Treaty of 1846

# Rulemaking References Examples

(U.S. Coast Guard and WA State reports)

10. Canada and US Agreement on Vessel Traffic Management for the Juan De Fuca Region
11. [USCG Puget Sound PAWSA \(2017\)](#)
12. [Regulatory Assessment: Use of Tugs to Protect Against Oil Spills in the Puget Sound Area, prepared for United States Coast Guard \(1999\)](#)
13. [Washington SRKW Task Force \(2018\)](#)
14. [Ecology Report of Vessel Traffic and Vessel Traffic Safety: Strait of Juan de Fuca and Puget Sound Area \(2019\)](#)
15. [Study of Tug Escorts in Puget Sound, prepared for WA Dept of Ecology \(2004\)](#)
16. [Ecology Tug Escort Analysis Report](#)
17. [Ecology ERTV Analysis Report](#)
18. [Ecology Vessel Activity Synopsis](#)

# Rulemaking references examples

(Pilotage groups- BPC, PSP, PPA)

19. [BPC Geographic Zones](#)
20. [BPC Synopsis of Changing Vessel Traffic Trends](#)
21. [PPA Notice to Industry: Escort tug rules for ships carrying liquids in bulk](#)
22. [Pacific Pilotage Authority General Information For Agents Booklet Sep 2018](#)
23. [Report on the findings of the Pilotage Risk Management Methodology PRMM to assess the Use of Escort Tugs in Haro St and Boundary Pass for Liquid Bulk Vessels, In Product, less than 40,000 SDWT](#)
24. Puget Sound Pilots and Pacific Pilotage Authority MOU
25. Coast Pilot 10 [CPB10 WEB.pdf \(noaa.gov\)](#)



# Rulemaking References Examples

(Academic, Research, Industry Publications)

26. [Standard Guide for Escort Vessel Evaluation and Selection \(astm.org\)](#)
27. [Allan and Molyneux 2004 EscortTugDesignAndAlternatives](#)
28. [Allan and Phillips 2013 An Evaluation of Local Escort and Rescue Tug Capabilities in Juan de Fuca Strait](#)
29. [Allan and Phillips 2016 Summary of BAT requirements](#)
30. [Marine Oil Spill Prevention, Preparedness, Response, and Recovery: World-Leading Examples \(2015, Nuka Research\)](#)
31. [Merrick. 2002, Evaluation of Tug Escort Schemes Using Simulation Drifting Tankers](#)
32. Gray2001. WorkBoat. Development of Tanker Escort Regulations in the US
33. Brooks and Slough, The Utilization of Escort Tugs in Restricted Waters
34. [VTRA 2015 FINAL REPORT, UPDATING THE VTRA 2010](#)
35. [TRANSMOUNTAIN Marine Safety Enhancements](#)






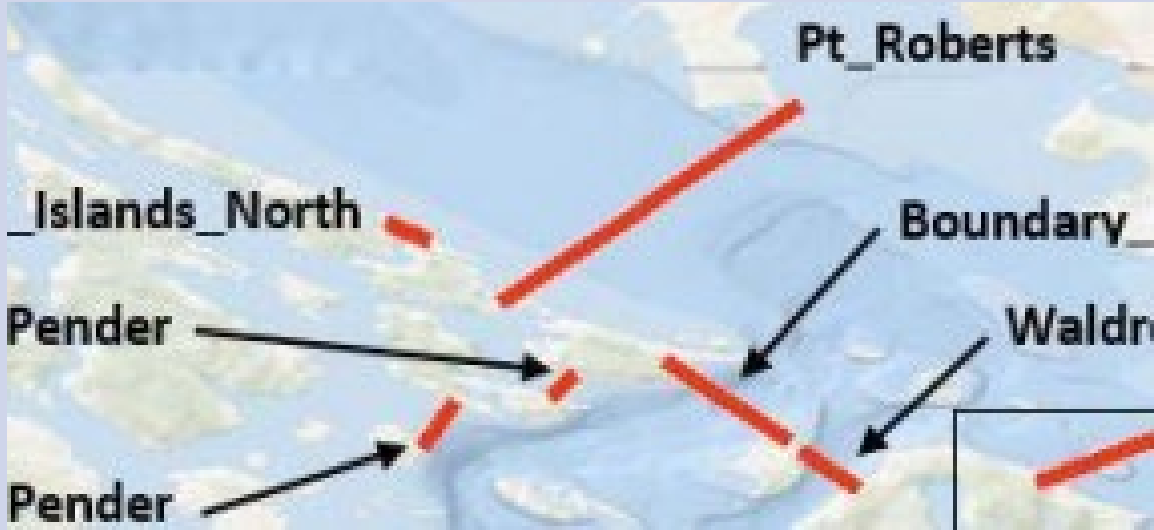
## Overarching Escort Benefits

- Oil spill risk reduction <sup>2, 12, 14</sup>
- Immediate assistance for loss of propulsion or steering <sup>2, 12, 14, 23, 30</sup>
- Enhanced situational and hazard awareness <sup>12, 14, 15, 30</sup>
- Increased number of capable tugs in the region to act as tugs of opportunity
- Ensure Washington remains a leader in environmental protection (See MA and CA requirements which both include escorts for barges and ATBs)



# Overarching Escort Concerns

- Tribal treaty rights and fishing area impact
- Air Emissions
- Underwater Noise
- Waterway Congestion
- Oil Spills from tug incidents
- Uncertainty on tug availability
- Uncertainty about compatibility with cross-border regulations


# Zone Considerations

Zone	Risk or Concern
<p><b>Eastern Strait of Juan de Fuca</b></p> 	<p>Port Angeles Precautionary Area is vulnerable to congestion <sup>11</sup></p>
<p><b>San Juan Islands</b></p> 	<p>Conflict between commercial and recreational vessels where the Islands open to the main shipping channel <sup>11</sup></p>
<p><b>Strait of Georgia</b></p> 	<p>The 2021 Ecology Vessel Activity report's Point Roberts transit line showed 23 percent bulk carriers, 22 percent tugs, and 12 percent container ships. <sup>18</sup></p> 


# Zones Considerations

Zone	Risk or Concern
<p data-bbox="93 324 806 380"><b>Haro Strait/ Boundary Pass</b></p>  	<p data-bbox="869 324 3112 465">Combination of shallow water hazards, narrow channels and significant channel bends. <sup>14, 23</sup></p> <p data-bbox="869 549 3252 690">Turn Point and East Point area is high risk for drift groundings. This area is vulnerable to congestion, whirlpools and upwelling <sup>11, 14, 23</sup></p> <p data-bbox="869 718 3258 943">The United States and Canada, in cooperation with industry and the British Columbia Coast Pilots, established a Special Operating Area at the intersection of Haro Strait and Boundary Pass in the vicinity of Turn Point Light. <sup>25</sup></p> <p data-bbox="869 962 2602 1028">Portions of this area can see heavy and dangerous tide rips. <sup>25</sup></p> <p data-bbox="869 1103 3178 1497">2021 Ecology Vessel Activity report's crossing line at the south end of Haro Strait showed recreational vessels made up a high percentage of Haro South transits (24 percent, 2,960 transits). Bulk carriers make up 21 percent (2,600 transits) and container ships make up 12 percent (1,427 transits) of Haro South crossing line transits. <sup>18</sup></p> <p data-bbox="869 1581 3242 1806">This is the zone tankers traffic to the Westridge Marine Terminal would travel through. Tanker numbers to that terminal are expected to grow from 5 to 34 tankers a month as a result of the Transmountain expansion project. <sup>35</sup></p>



# Zones Considerations

Zone	Risk or Concern
<p data-bbox="33 352 693 480"><b>Rosario Strait and waters east</b></p> 	<p data-bbox="769 352 3288 864">Rosario Strait is a narrow waterway connecting the Strait of Georgia and the Inland Passage of British Columbia with the Strait of Juan de Fuca. Rosario Strait is part of the larger Eastern San Juan Island VTS Special Area. An International Maritime Organization (IMO) designated one lane Traffic Separation Scheme (TSS) with no separation zone traverses Rosario Strait. Rosario Strait experiences substantial tidal currents and has numerous hazards to navigation. <sup>1</sup></p> <p data-bbox="769 1001 3288 1427">Pilots encounter fishing vessels. Strong currents slow down tug and barge traffic. There is a high risk of groundings due to rocky shoals and currents, rocky shorelines, shallow water hazards, narrow channels and significant channel bends. Transit corridors are limited by off-lying hazards and distance from infrastructure.<sup>11,</sup> <sup>14</sup> There is a choke point between Huckleberry and Saddlebags Islands. <sup>14</sup></p>




# Zones Considerations

Zone	Risk or Concern
<p data-bbox="33 352 693 484"><b>Rosario Strait and waters east</b></p>  <p>The map shows the Rosario Strait and surrounding waters. Key locations labeled include South, Bellingham, Rosario Strait, Bellingham Channel, Sinclair Island, and waters to the East, Anacortes, and Guemes Channel and Saddlebags.</p>	<p data-bbox="769 461 3285 930">2015 VTRA findings on impacts of untethered escorts on ATBS and barges were that the greatest decreases in potential oil losses were in Rosario and Saratoga/Skagit waterway zones and the greatest reductions in potential accident frequency in Puget Sound South and Guemes waterway zones. <sup>14</sup></p> <p data-bbox="769 1089 3285 1558">2021 BPC Vessel Traffic Trend Report found the 2020 Tug Escort Requirement didn't meaningfully affect route selection or tank vessel traffic and that most transits in the study area by tank vessels subject to the tug escort requirement were through Rosario Strait both before and after the tug escort requirement took effect. <sup>20</sup></p>

# Zones Considerations

Zone	Risk or Concern
<p data-bbox="33 356 699 487"><b>Rosario Strait and waters east</b></p>  <p data-bbox="49 665 749 1219">           South            Bellingham            Rosario Strait            Bellingham Channel, Sinclair Island, and waters to the East            Anacortes            Guemes Channel and Saddlebags         </p>	<p data-bbox="783 356 3282 741">2021 Ecology Vessel Activity report's crossing lines at Rosario South and Rosario North had the second and third highest tug transit counts in that study area in 2018 (4,076 for Rosario South and 3,727 for Rosario North), exceeded only by the Admiralty Inlet line which saw 4,168 tug transits. <sup>18</sup></p>  <p data-bbox="816 862 3115 1632">           Rosario_North            Sinclair_Lummi            Guemes_Cypress            Saddlebag_Huckleberry            Rosario_South  <small>Esri, Garmin, GEBCO, NOAA, NGDC, and other contributors</small> </p>

# Vessel Types: Other Jurisdictions

Jurisdiction	Escort Requirement Applies To:		
	Tank Barge 	ATB 	Tanker 
California	✓	✓	✓
Massachusetts	✓	✓	
Prince William Sound			✓
British Columbia			✓



# Vessel Type: Tank Barge

## 2019 Report of Vessel Traffic Safety<sup>14</sup>

### Incidents WA/OR (2008 – 2017) :

- 45 incidents, most were groundings and allisions
- 26 were spills, most while moored
- 19 were non-spill incidents
  - Ecology found that a tug escort could have further reduced oil spill risk for 7 of them.

# Vessel Type: ATB

## 2019 Report of Vessel Traffic Safety<sup>14</sup>

### Incidents WA/OR (2008 – 2017) :

- 20 incidents, most were near miss events and equipment failures
- 4 were oil spills while moored
- 16 were non-spill incidents
  - Ecology found that a tug escort could have further reduced oil spill risk for 4 of them.

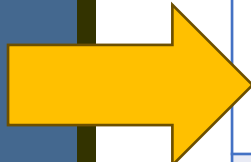
# Other Analysis Data to Inform Rule- making

The BPC Oil Transportation Safety Committee (OTSC) met with the rule team in early January to discuss rulemaking data needs.

Based on this conversation, the modeling team will produce additional views of the modeling results that focus specifically on the benefits of escorts to specific zones and vessel types of interest.

# EIS and Rulemaking Process Run Concurrently

Rulemaking  
and SEPA  
Process



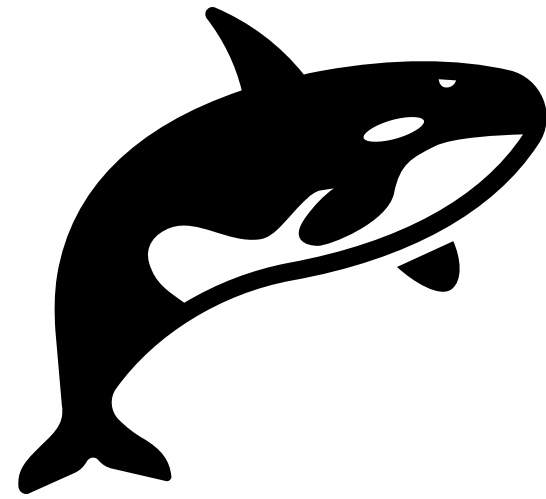
Rulemaking Action	SEPA Action	Proposed Timeline
Rulemaking Announcement ( <a href="#">CR-101 filing</a> ):	<a href="#">Determination of Significance</a> / Scoping Comment Period	February 22, 2023
Rule Development Workshops	EIS Development Workshops	March 2023 – December 2024
Rule Proposal and start of comment period (CR-102 Filing)	Issuance of Draft EIS with CR-102 and comment period.	Anticipated July 2025
Rule Adoption (CR-103 Filing)	Final EIS issued at least 7 days before the CR-103	Anticipated December 2025
Rule Effective	N/A	Anticipated January 2026

# Proposed EIS Scope

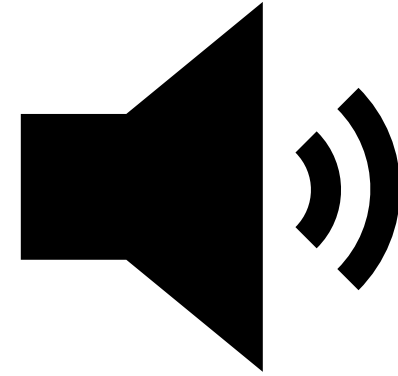
## From Determination of Significance (Feb. 2023). The EIS may consider:

- Historic and Cultural Resources
- Air Quality
- Water Quality
- Plants and Animals
- Energy and Natural Resources
- Environmental Health
  - Noise
  - Releases or potential releases to the environment affecting public health
- Light and Glare
- Aesthetics
- Recreation
- Transportation

Early  
Focus of  
EIS  
Scoping  
Comments



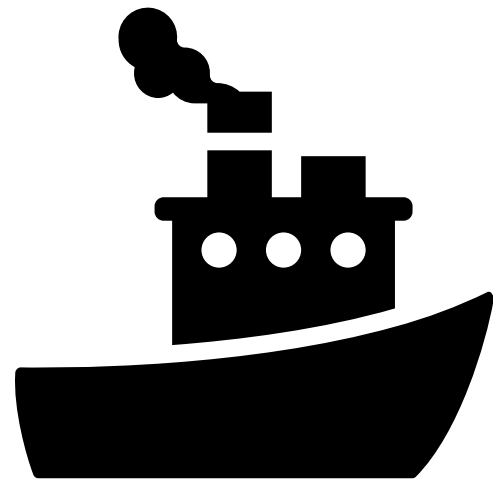
**SRKW and  
Marine Mammals**



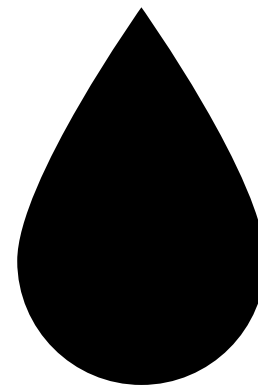
**Underwater  
Noise**



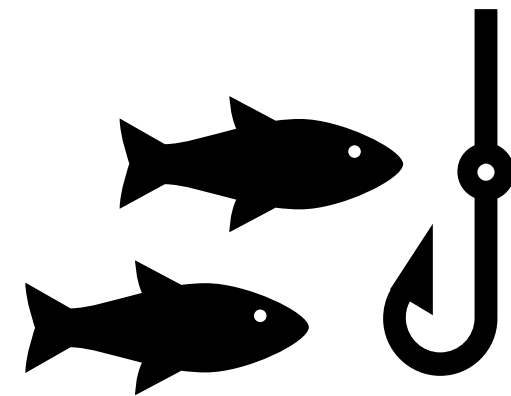
**Air Emissions**



**Vessel Traffic  
Congestion,  
Navigational  
Safety**



**Oil spill risk**



**Treaty fishing  
impacts**

# SEPA Process



## Immediate Next Steps:

- **March 5, 2024:** Additional SEPA Scoping Workshop
- **DECISION POINT - March BPC Meeting:** BPC decision on initial alternatives and elements to assess in the EIS
  - OTSC to provide recommendation.
- **February – December 2024:** Ongoing SEPA workshops and coordination with rule language development

## Questions, Comments, Want to Talk SEPA Sooner?

Point of Contact: Haley Kennard, Tug Escort

Environmental Analysis Coordinator

[haley.kennard@ecy.wa.gov](mailto:haley.kennard@ecy.wa.gov) or (564) 233-5178



# Model Team Response to AWO

## Model Team Response to AWO's January 18 Public Comment

AWO Statement: *The results that stood out to AWO were that tug escorts only provided a minimal risk reduction of 0-2% across the study area and increased vessel activity by up to 50% and underway time by up to 263%.*

**Model Team Response:** Only escort tugs experienced an increase in underway time. The model estimated a 263% increase in escort tug underway time when compared to escort underway time prior to the establishment of the Rosario requirements in 2020.

AWO Statement: *Ecology utilized drift groundings from across the country. Because they are so rare in this area, they had to look at the Eastern seaboard for 190 additional drift grounding to build the model.*

**Model Team Response:** Ecology did not use drift groundings as a model input, and Ecology did not use incidents from outside the local area as a model input. Although many other risk assessments use data from other regions, we specifically avoided that due to the feedback from AWO and other stakeholders that they did not want data from other regions to be used. The only incident related model inputs are loss of propulsion and loss of steering events, and those are drawn solely from the local area (See Figure B-2, for a map).

AWO Statement: *While the model considered different types of towing vessels, it used faulty assumptions, in AWO's opinion, despite countless efforts on AWO's part to bring attention to the issues. For example, they assumed all barges were unmanned, which is not the case. There are several types, some of which are manned and deploy anchors when at risk.*

**Model Team Response:** The model simulated towing vessels as unable to anchor because many tank barges in the local area are unmanned, and unable to anchor in an emergency. As part of the rulemaking process, and at the request of an AWO member, we have changed the model parameters to allow all barges the ability to anchor. This has the effect of slightly reducing the utility of tug escorts for barges. For example:

- A 5.5% risk reduction in Rosario and connected waters (no barge anchoring)
- A 4.8% risk reduction in Rosario and connected waters (yes barge anchoring)





# Model Team Response to AWO

## Model Team Response to AWO's January 18 Public Comment

AWO Statement: *It was incorrect to assume that all loss of propulsion events would lead to a drift grounding.*

**Model Team Response:** The model does not assume that all loss of propulsion events lead to a drift grounding.

AWO Statement: *Additionally, the model assumes that all vessels have a single propulsion system.*

**Model Team Response:** The model does not assume all vessels have a single propulsion system. The model assumes that all vessels have the same rate of total loss of propulsion per loss of propulsion report. For each loss of propulsion event, the model assumed 76% of them did not result in a complete loss of propulsion (Page B-48).

AWO Statement: *Many towing vessels and ATBs have redundant engines. Therefore, it's very unlikely these vessels would have a loss of propulsion.*

**Model Team Response:** Our review of incident reports for the local area from 2002 to 2019 found 7 loss of propulsion reports for towed oil barges and ATBs. That is the value we used as a model input (Table B-22).

AWO Statement: *it was inaccurate for Ecology to assume that any loss of propulsion would automatically result in a drift grounding.*

**Model Team Response:** The model does not assume that all loss of propulsion events lead to a drift grounding. In fact, only around 4.7% of the loss of propulsion events in the model resulted in a drift grounding (See Table A-7). For a loss of propulsion to become a drift grounding it must: Be determined to be a total loss of propulsion, have a self-repair time longer than its drift to ground time, not be saved by an escort, not be saved by an ERTV, not be saved by a tug of opportunity, not be able to anchor (except barges)

AWO Statement: *any spill event would result in 100% of the product being discharged into a waterway*

**Model Team Response:** The model does not assume any spill event would result in 100% of the product being discharged into the waterway.



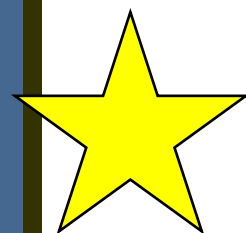
# Upcoming Workshops

Dates	Activity
February 2023	CR-101 – Rule Announcement
March 2023	SEPA Scoping Meeting
May 2023 – December 2024	Workshops with Tribes, Stakeholders, and Interested Parties
July 2025	CR-102, Propose Rule
December 2025	CR-103, Adopt Rule
January 2026	Rule Effective

## February/March OTSC Focus:

- February 13 – Initial Filtering Results
- February 28 – Filtering Results Cont'd & EIS Scoping Refinement
- March 11 – Finalize Recommendation to BPC on EIS Scoping and Escort Ideas

**March 21 – BPC Final Adoption of EIS Scoping and Escort Ideas**





**PUGET SOUND PILOTS**  
Protecting Puget Sound Since 1935

# Puget Sound Pilotage Service

- Safety
- Expertise
- Efficiency
- Leadership





# Pilot Facing Elements of the Service

## Continuing Education

- Mandatory Training
- Best-Practices Training
- Upgrade Trips
- Pilot Trainers
- Navigation Technology
- Onboarding New Pilots
- Pilot Conferences

## Business Management

- Board of Directors
- Efficiency Committee
- Coe System and Dispatch
- Rate Committee (Pension, Transportation)
- Capital Expenses and Maintenance/Green Marine
- Station Management
- Labor Negotiation

## Local Knowledge/Waterfront Stakeholders

- Reference Manual
- Vessel Traffic Service
- Safe Practices Committee
- Least Depth Committee/Army Corps
- NOAA Coast Survey
- Ports and Customers



# Public Facing Elements of the Service

## Safety/Regulatory

- Training & Evaluation Committee (Exam and Sim Prep)
- Vessel Exemption Committee
- MSO and Vessel Casualty Investigation
- Pilot Safety Committee
- Diversity Equity & Inclusion
- USCG First Class Pilotage
- USCG Area Maritime Security Committee
- USCG Boating Safety
- Puget Sound Harbor Safety Committee

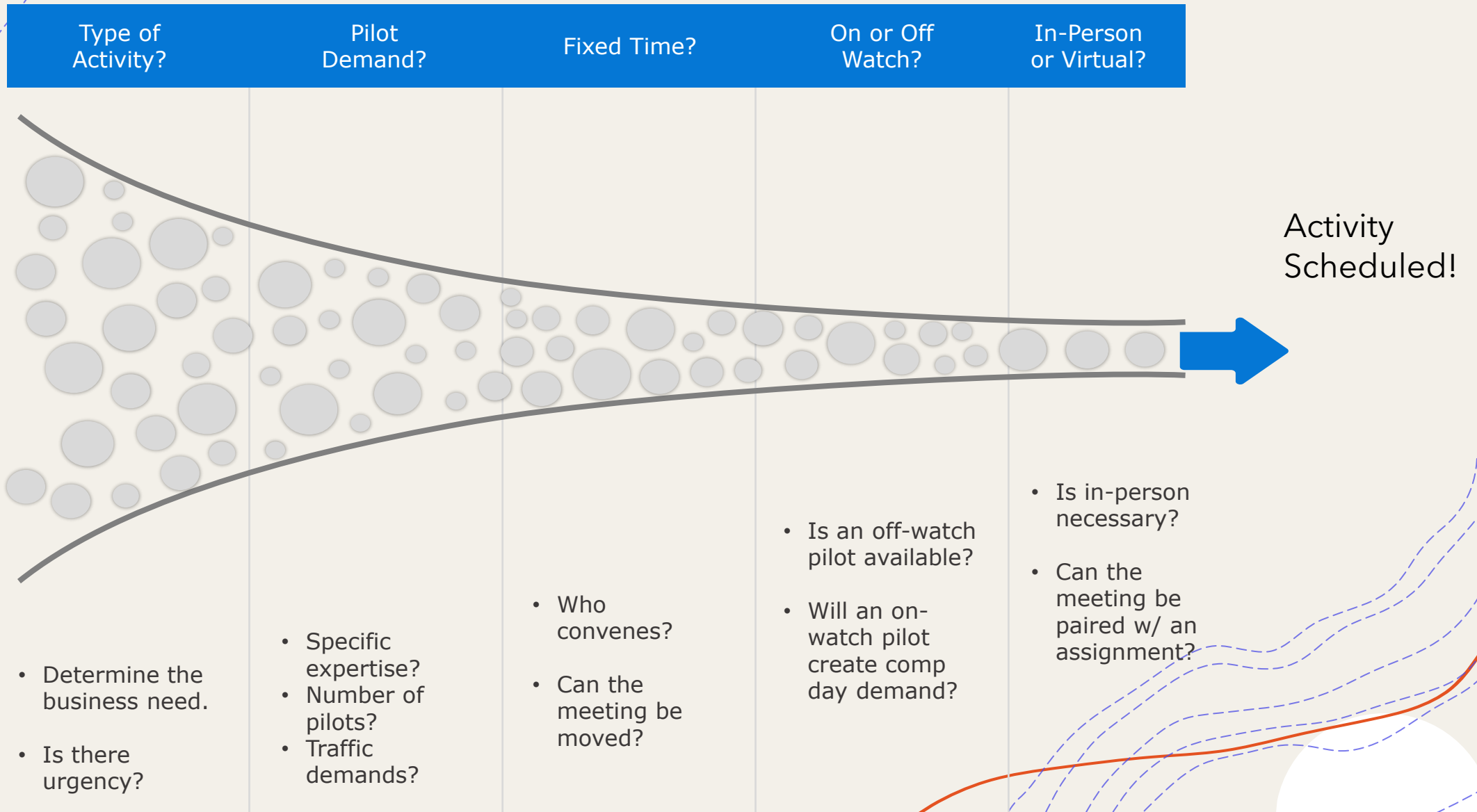
## Environmental

- Oil Transportation Safety
- Quiet Sound/ECHO
- NW Straits Foundation

## Outreach

- Maritime High School
- Schooner Adventuress
- CorePlus Maritime
- Women Offshore Conference
- Maritime Academies
- Political and Regulatory Activity

# Prioritizing Non-Revenue Generating Activity

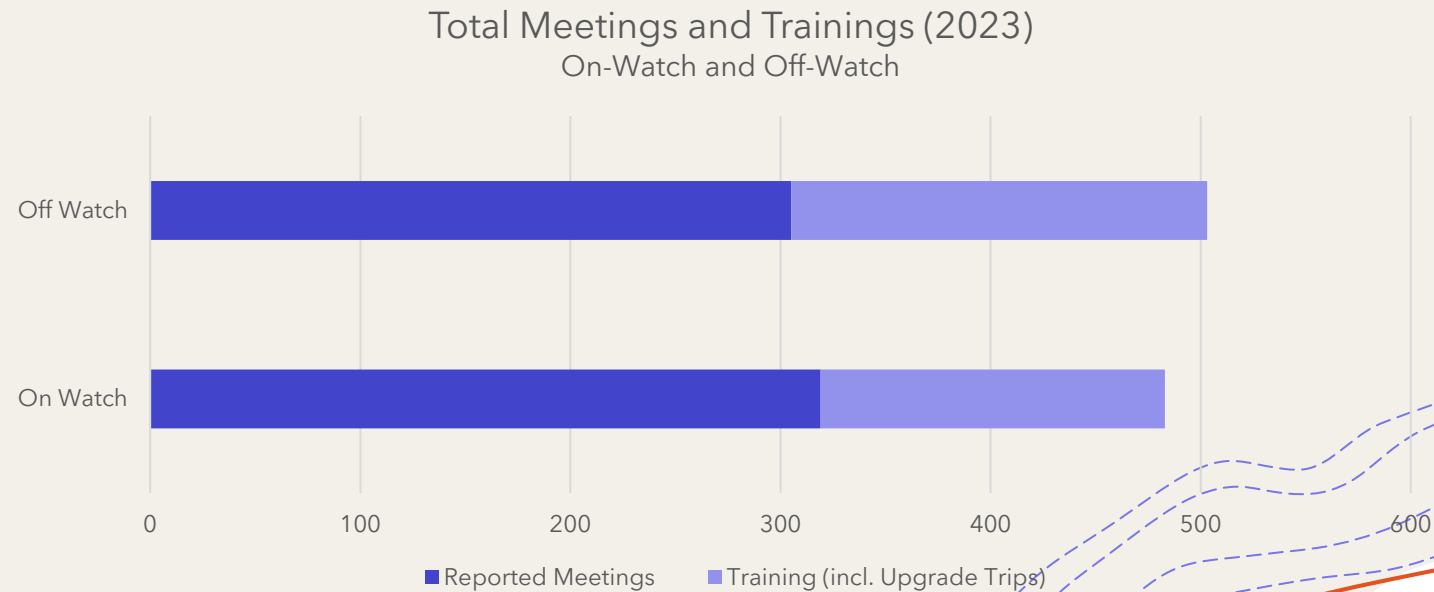


# Total Demand on Pilot Workload

- 239 total reported meetings to the BPC in 2023.
- Some off-watch activity is unreported.
- Training is not included.

	Total
Safety/Regulatory (incl. multiple pilots)	116
Outreach (incl. multiple pilots)	42
Administrative (incl. multiple pilots)	81

- Total meetings are approx. 50/50 on- and off-watch.
- More training and upgrades occur off-watch.
- None of this activity generates revenue (but often supports activity that does!)



# Service Value

The non-revenue generating work of PSP is important and necessary.

PSP manages pilot and staff participation in this important work with efficiency and consistency.

The value, time involved, impact, and necessity of non-revenue generating assignments to maintain the pilotage service is important to understand.