



Washington State
Chum, Sockeye

2024 Forecast Review

**CHUM AND SOCKEYE SALMON
CO-MANAGER RUNSIZE FORECASTS FOR THE 2024 RETURN YEAR**

CHUM - SUMMER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Central Sound		1,052	1,052	Ocean indicator regression
South Sound		35,197	35,197	Ocean indicator regression
Hood Canal*		24,284	24,284	Ocean indicator regression
Strait of Juan de Fuca*		11,719	11,719	Ocean indicator regression
Puget Sound Total		72,252	72,252	

* Wild forecast includes supplementation returns.

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Nooksack/Samish	2,469	22,848	25,317	Ocean indicator regression
Skagit	185	22,768	22,953	Ocean indicator regression / Fry
Stillaguamish	38	9,074	9,112	R/S with ecological covariates
Snohomish	1,368	14,339	15,707	R/S with ecological covariates
Central Sound	99,888	76,566	176,454	Ocean indicator regression
South Sound	41,253	268,855	310,108	Ocean indicator regression
Hood Canal	191,559	63,341	254,900	Ocean indicator regression
Strait of Juan de Fuca	180	4,062	4,242	Ocean indicator regression
Puget Sound Total	336,940	481,853	818,793	

CHUM - WINTER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
South Sound	6,676	12,251	18,927	Ocean indicator regression
Puget Sound Total	6,676	12,251	18,927	

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Coastal				
Grays Harbor	1,967	67,308	69,275	Ocean indicator regression
Willapa	1,742	78,648	80,390	Ocean indicator regression
Coastal Total	3,709	145,956	149,665	

SOCKEYE

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Baker River		56,750	56,750	NPGO and sibling regression
Lake Washington	9,011	10,563	19,574	Sibling regression
Puget Sound Total			76,324	

SOCKEYE

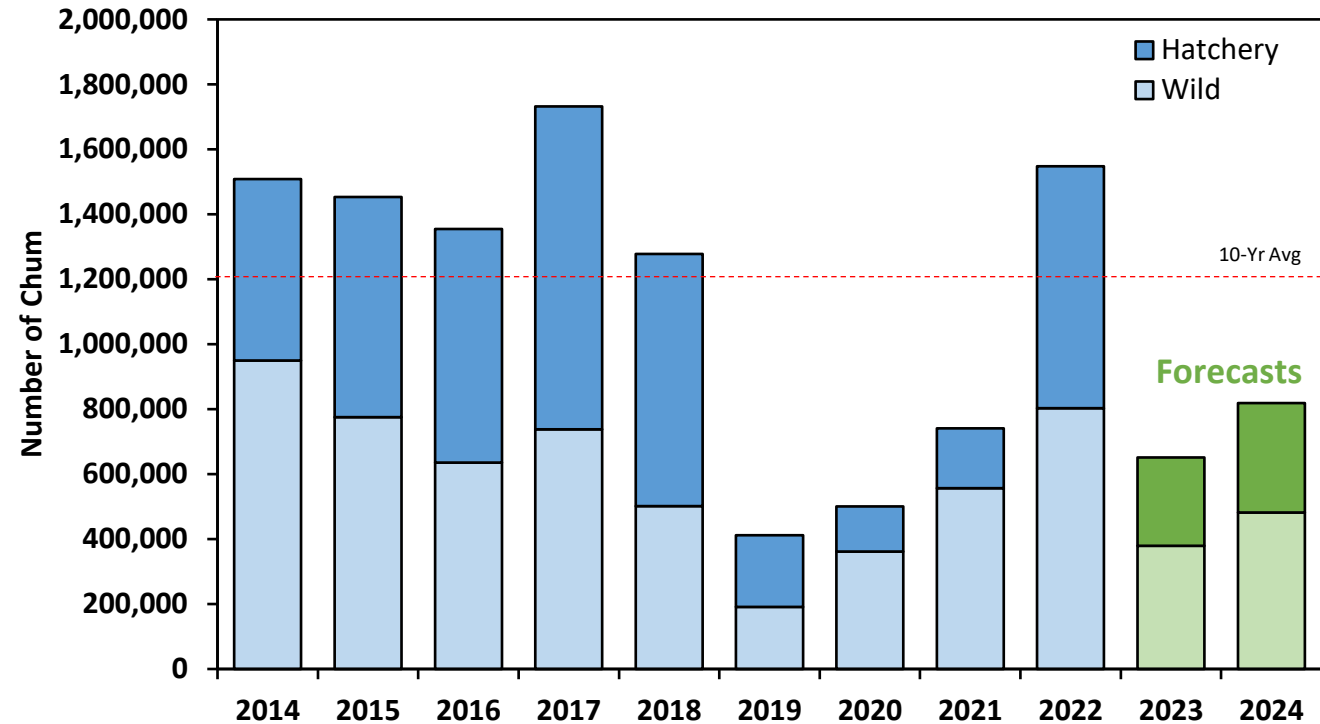
	HATCHERY	WILD	TOTAL	FORECAST METHOD
Columbia River				
Wenatchee River		97,000	97,000	Sibling Regression
Okanogan River		288,700	288,700	Sibling Regression
Yakima		12,100	12,100	Sibling Regression
Deschutes		100	100	Sibling Regression
Snake River		3,800	3,800	Sibling Regression
Columbia River Total		401,700	401,700	

Fraser River Forecasts (from Fisheries and Oceans Canada)

Sockeye Salmon	567,000	Median Estimate
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Puget Sound Fall Chum

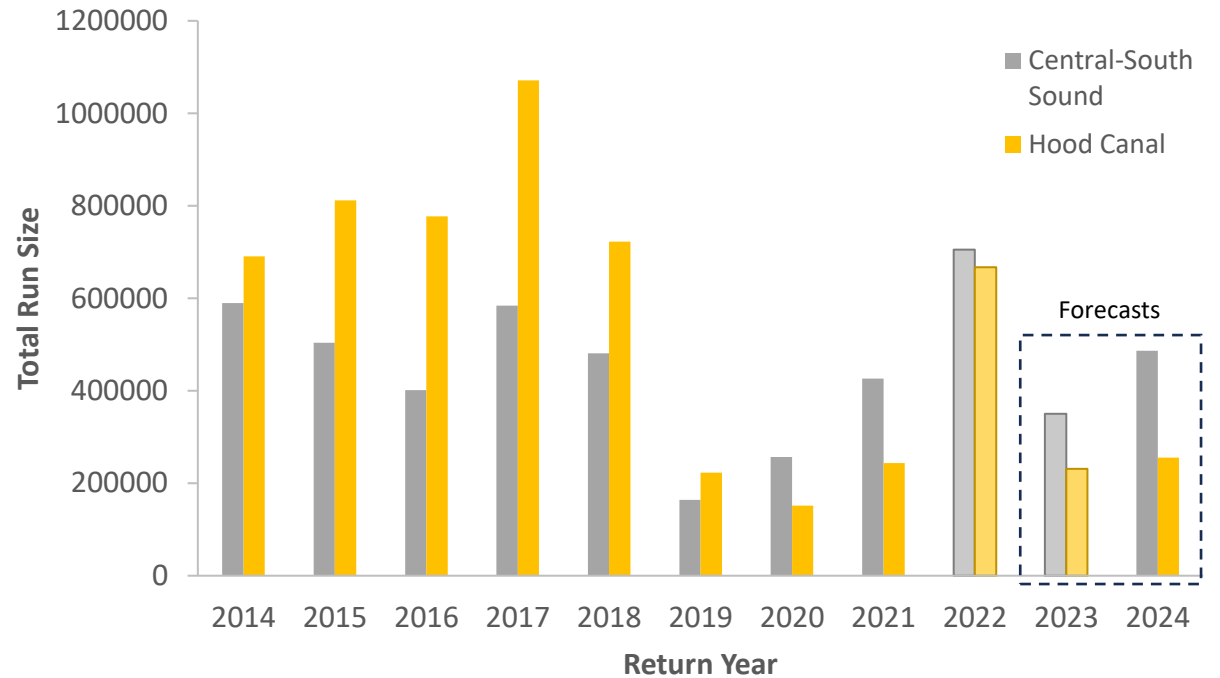
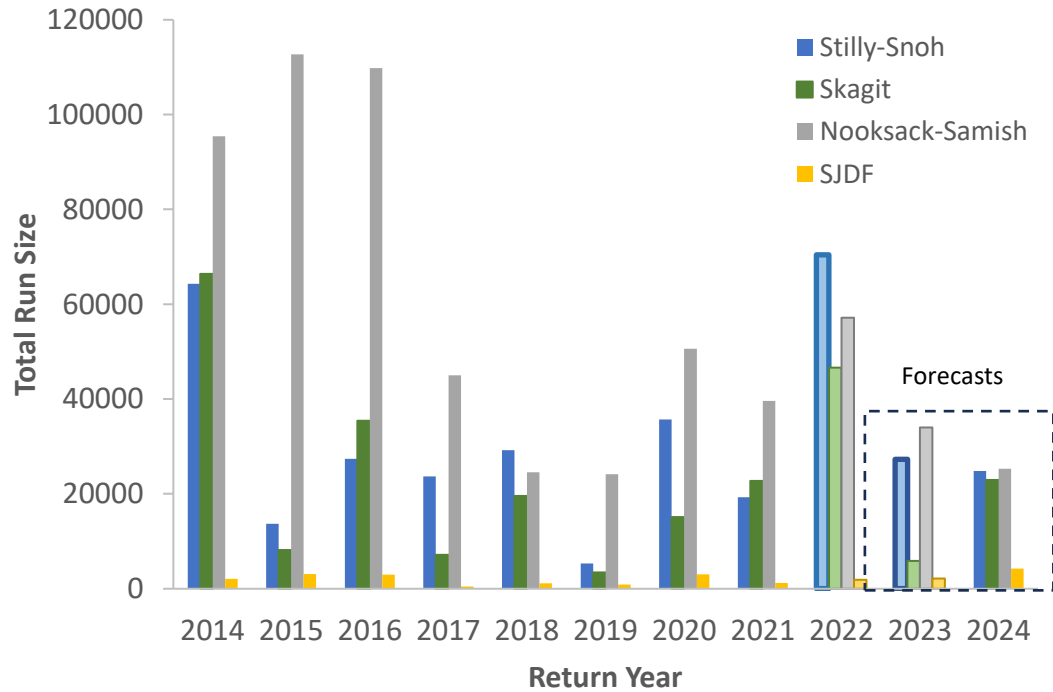
<u>CHUM - FALL</u>			
	HATCHERY	WILD	TOTAL
Puget Sound			
Nooksack/Samish	2,469	22,848	25,317
Skagit	185	22,768	22,953
Stillaguamish	38	9,074	9,112
Snohomish	1,368	14,339	15,707
Central Sound	99,888	76,566	176,454
South Sound	41,253	268,855	310,108
Hood Canal	191,559	63,341	254,900
Strait of Juan de Fuca	180	4,062	4,242
Puget Sound Total	336,940	481,853	818,793



Wild Forecast Notes:

- SS/CS – Ocean Indicator R/S Regression
- HC – Ocean Indicator R/S Regression and recent year R/S rate – Tribal/WDFW Average
- SJDF – Ocean Indicator Run Size Regression
- Nooksack/Samish – Recent 5-year median percent of ocean Indicator R/S regression
- Skagit – Ocean Indicator R/S Regression
- Stilly/Sno – Fry Based Regression

Puget Sound Regional Breakdown

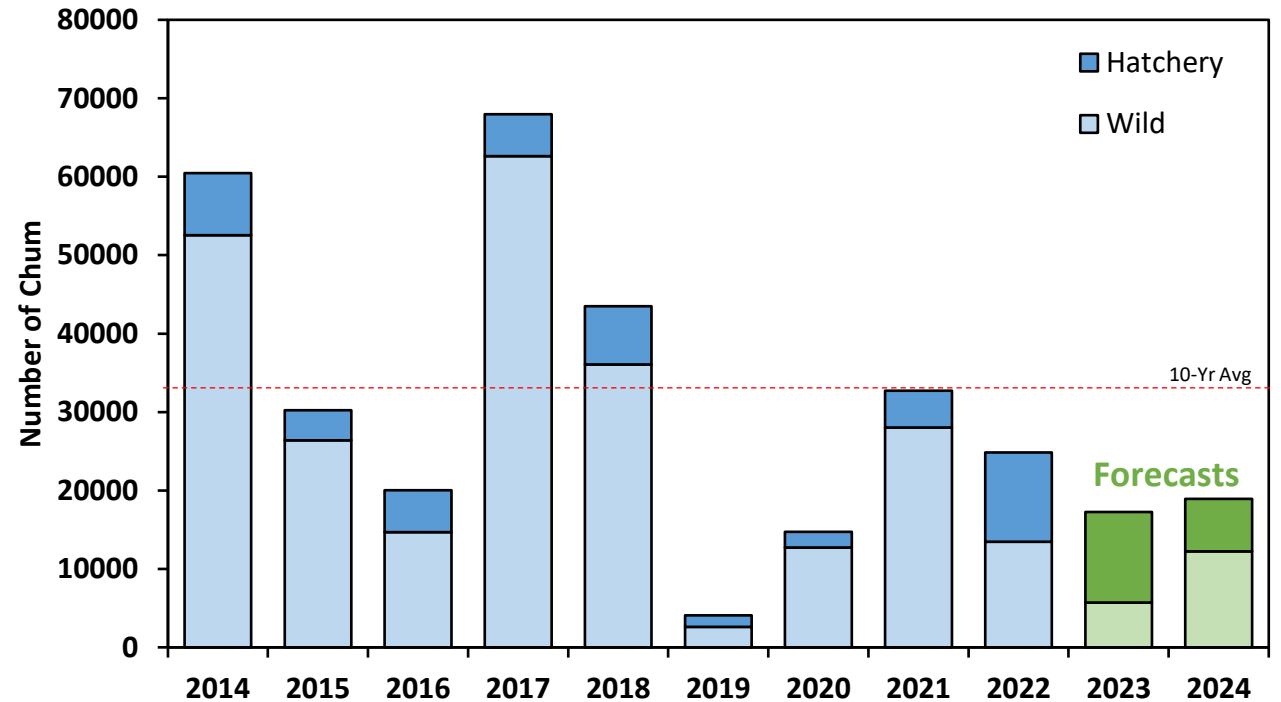


Puget Sound Winter Chum

<u>CHUM - WINTER</u>			
	HATCHERY	WILD	TOTAL
Puget Sound			
South Sound	6,676	12,251	18,927
Puget Sound Total	6,676	12,251	18,927

Wild Forecast Notes:

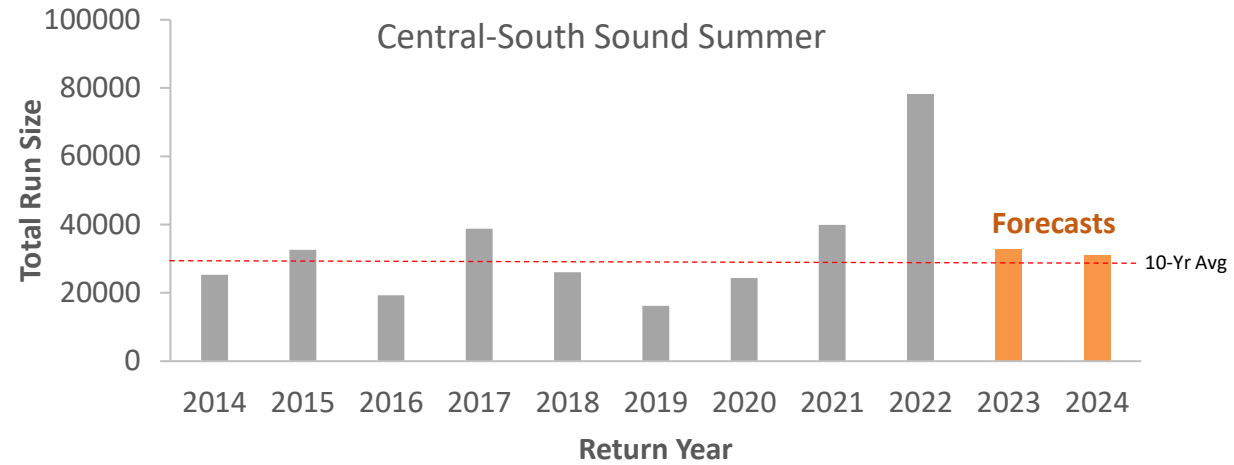
- Wild – Ocean Indicator R/S Regression
- Hatchery – Recent 3-year avg rate



Puget Sound Summer Chum

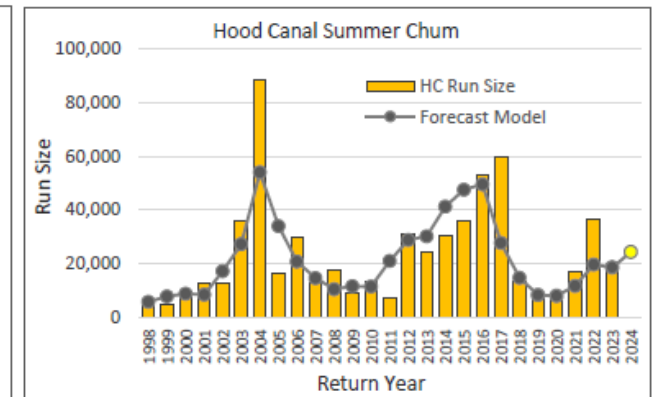
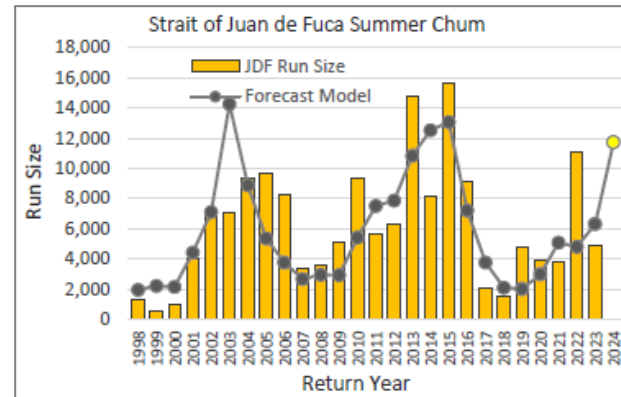
<u>CHUM - SUMMER</u>			
	HATCHERY	WILD	TOTAL
Puget Sound			
Central Sound		1,052	1,052
South Sound		30,071	30,071
Hood Canal*		24,284	24,284
Strait of Juan de Fuca*		11,719	11,719
Puget Sound Total		67,126	67,126

* Wild forecast includes supplementation returns.



Wild Forecast Notes:

- SS/CS – Ocean Indicator R/S Regression
- HC – Ocean Indicator Run Size Regression
- SJDF – Ocean Indicator Run Size Regression

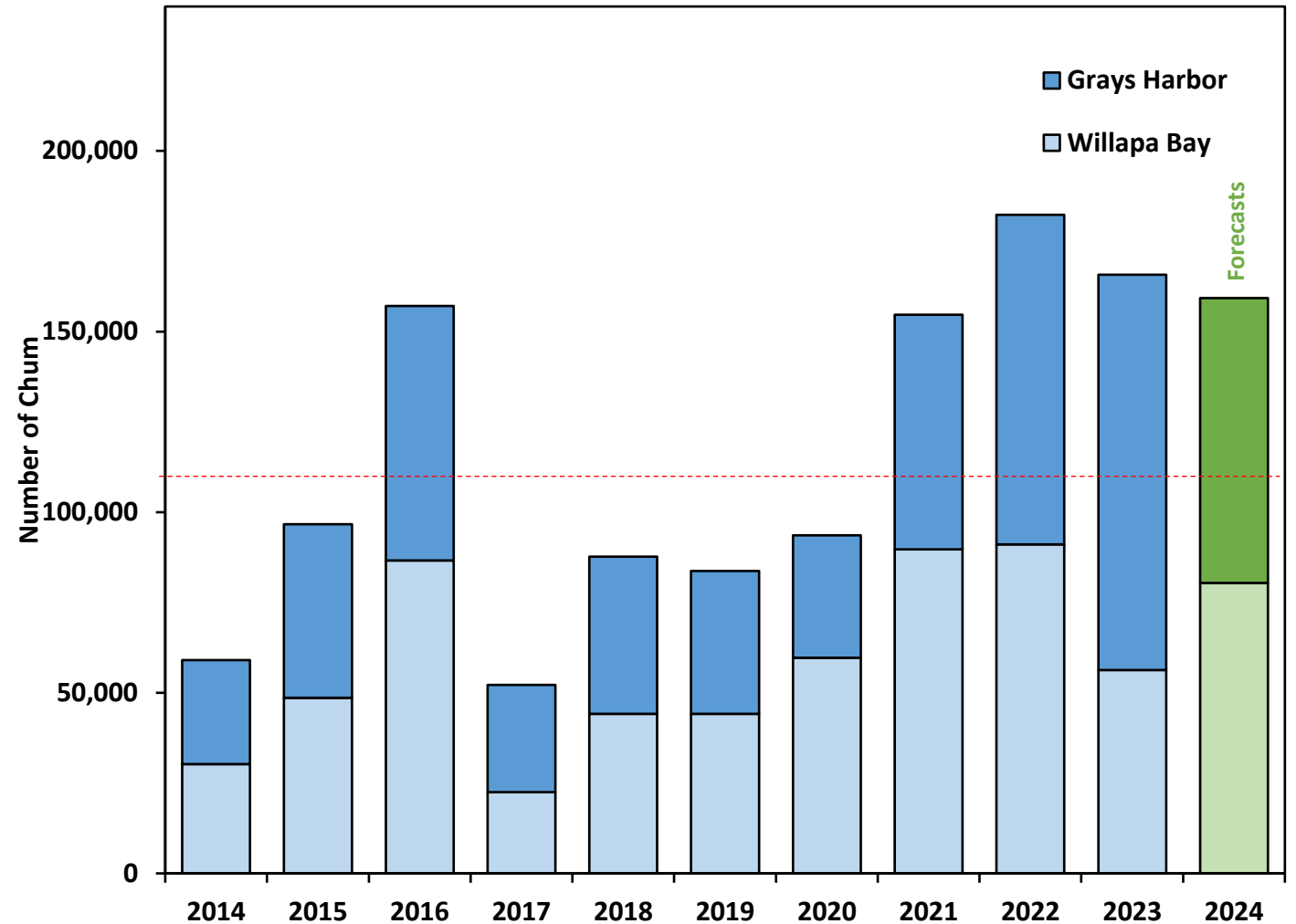


Coastal Fall Chum

<u>CHUM - FALL</u>			
	HATCHERY	WILD	TOTAL
Coastal			
Grays Harbor	TBD	TBD	0
Willapa	1,742	78,648	80,390
Coastal Total	1,742	78,648	80,390

Wild Forecast Notes:

- GH – Ocean Indicator R/S Regression and Mean Recent 5yr adjusted performance R/S
- WB – Ocean Indicator R/S Regression

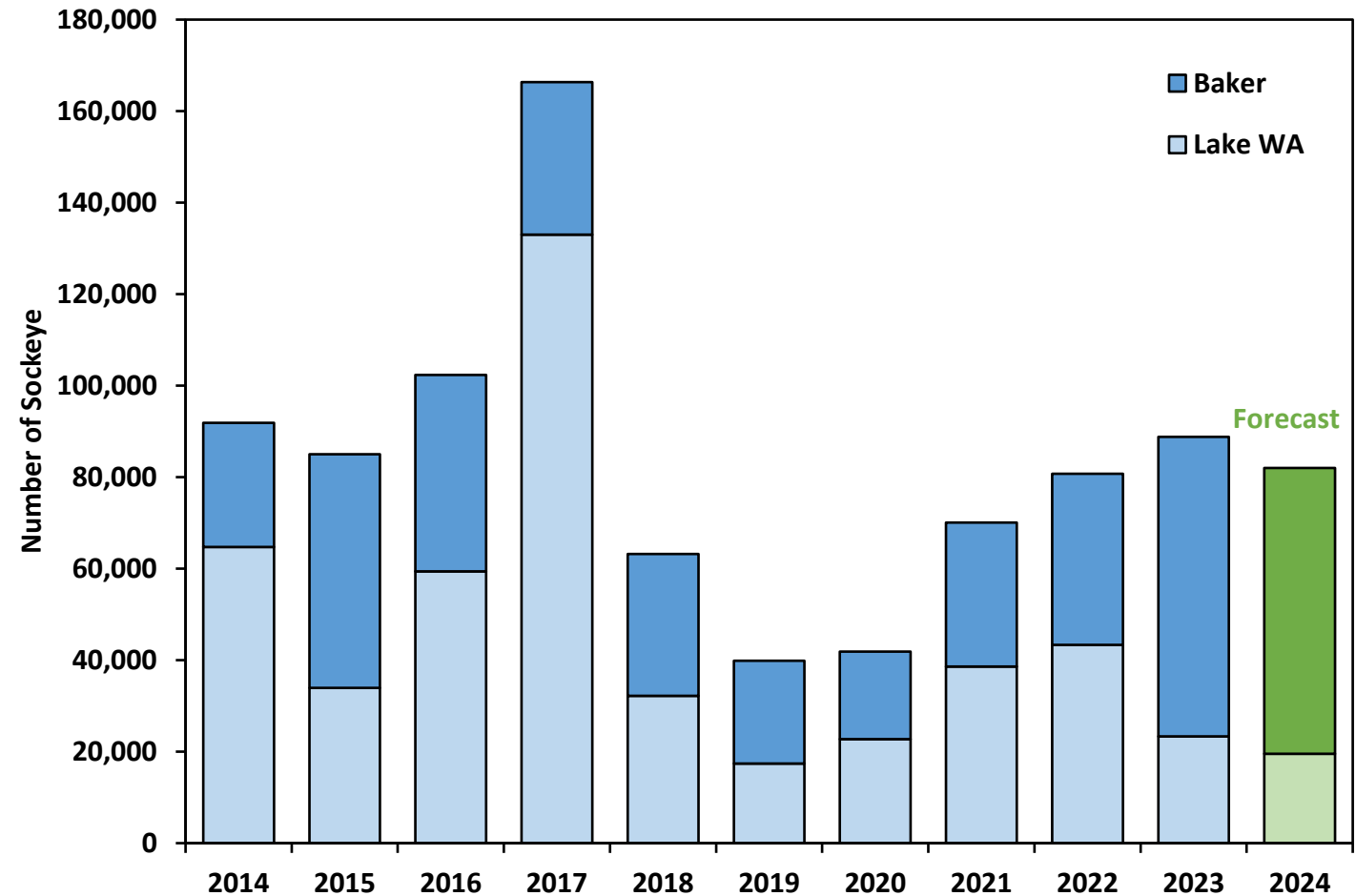


Puget Sound Sockeye

<u>SOCKEYE</u>			
	HATCHERY	WILD	TOTAL
Puget Sound			
Baker River		56,750	56,750
Lake Washington	9,011	10,563	19,574
Puget Sound Total			76,324

Wild Forecast Notes:

- Baker – NPGO regression adjusted for performance
- Lake Washington – Sibling regression and mean return rates

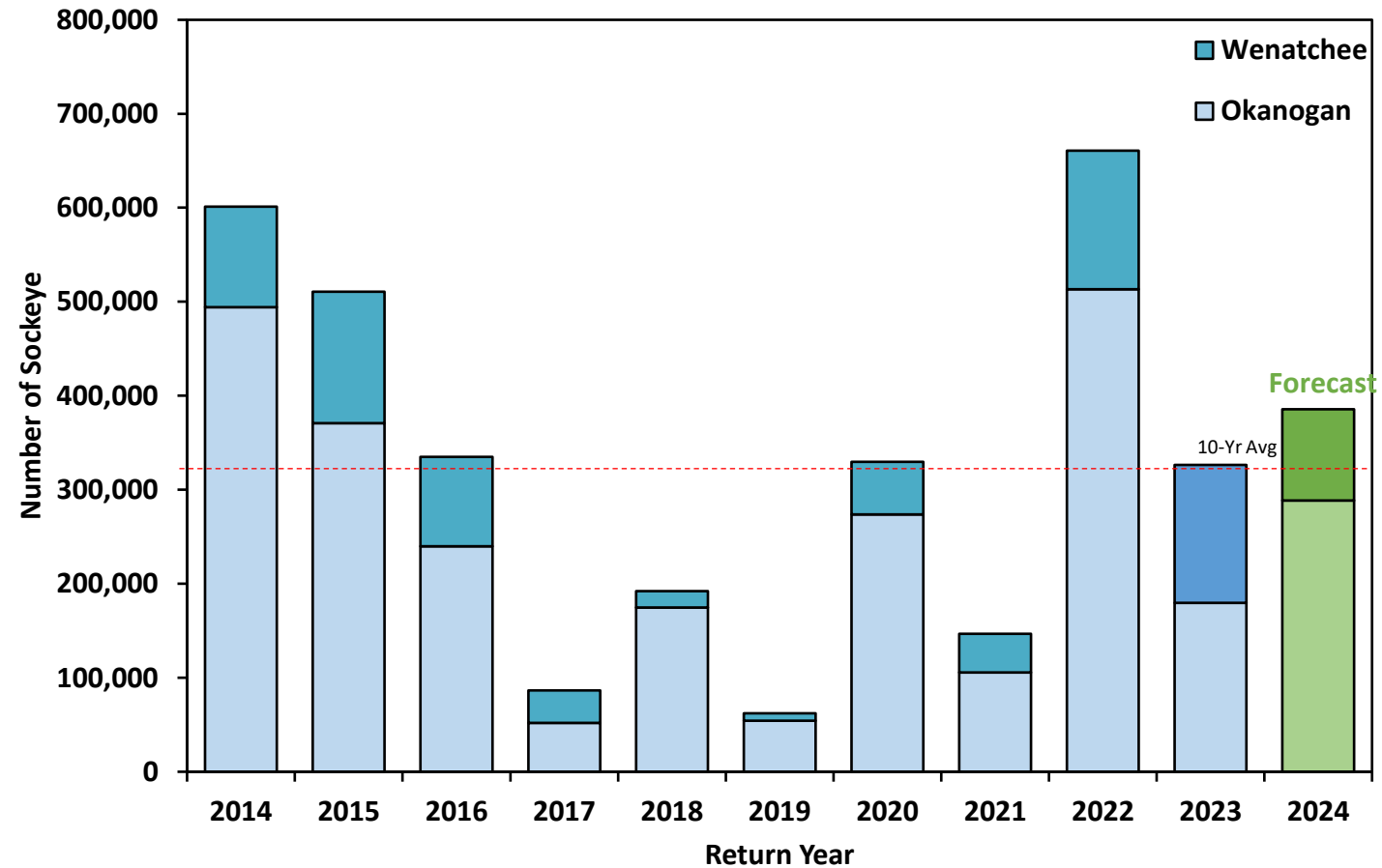


Columbia River Sockeye

<u>SOCKEYE</u>			
	HATCHERY	WILD	TOTAL
Columbia River			
Wenatchee River		97,000	97,000
Okanogan River		288,700	288,700
Yakima		12,100	12,100
Deschutes		100	100
Snake River		3,800	3,800
Columbia River Total		401,700	401,700

Wild Forecast Notes:

- Columbia River – New method: time varying sibling regression



Fraser River Sockeye

Fraser River Forecasts (from Fisheries and Oceans Canada)

Sockeye Salmon	567,000
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Wild Forecast Notes:

- 2020 Sockeye returns lowest on record

