

Cowlitz Salmon Hatchery Adult Handling & Distribution

September 4, 2024

**Cowlitz Annual Program Review
and Science Conference**

Jamie Murphy,

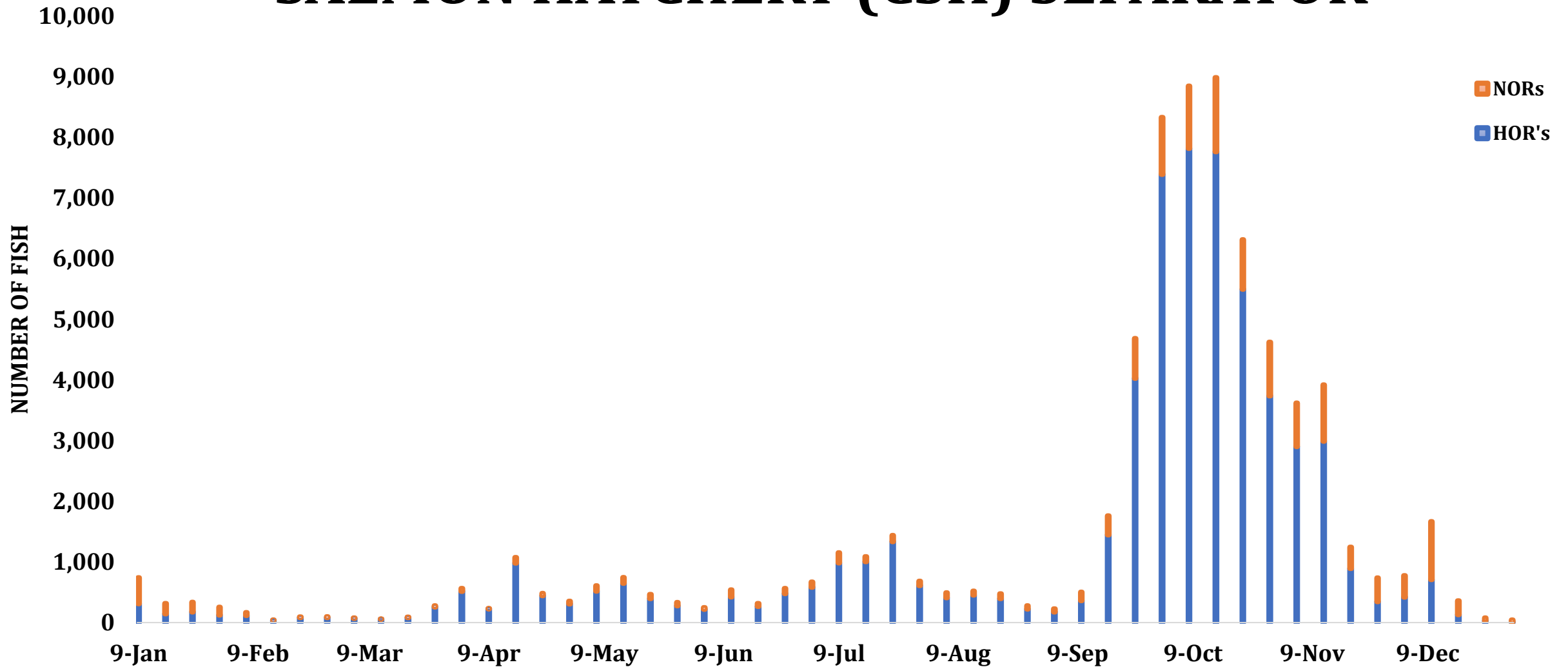
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2023 WEEKLY RETURNS TO THE COWLITZ SALMON HATCHERY (CSH) SEPARATOR

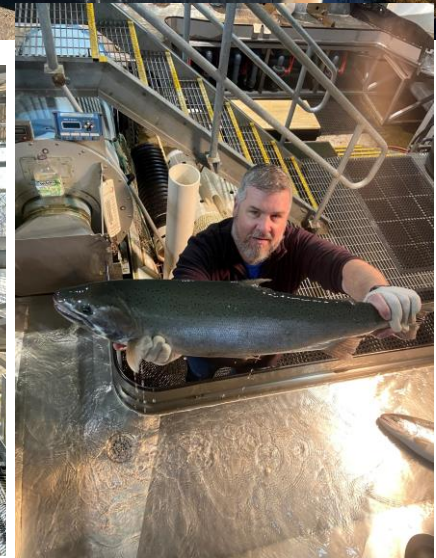
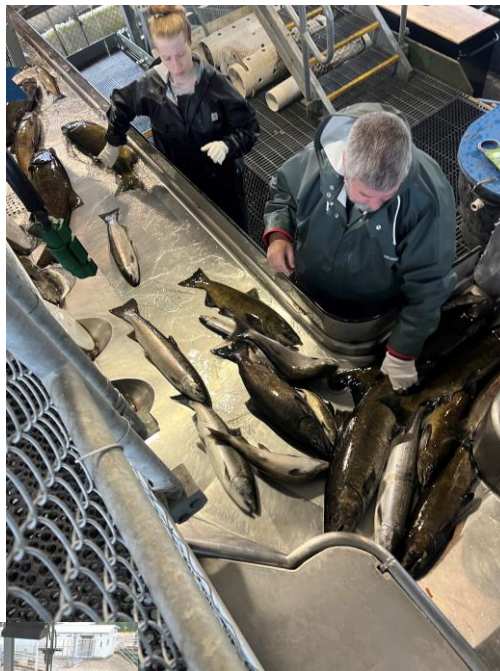


What we will cover:

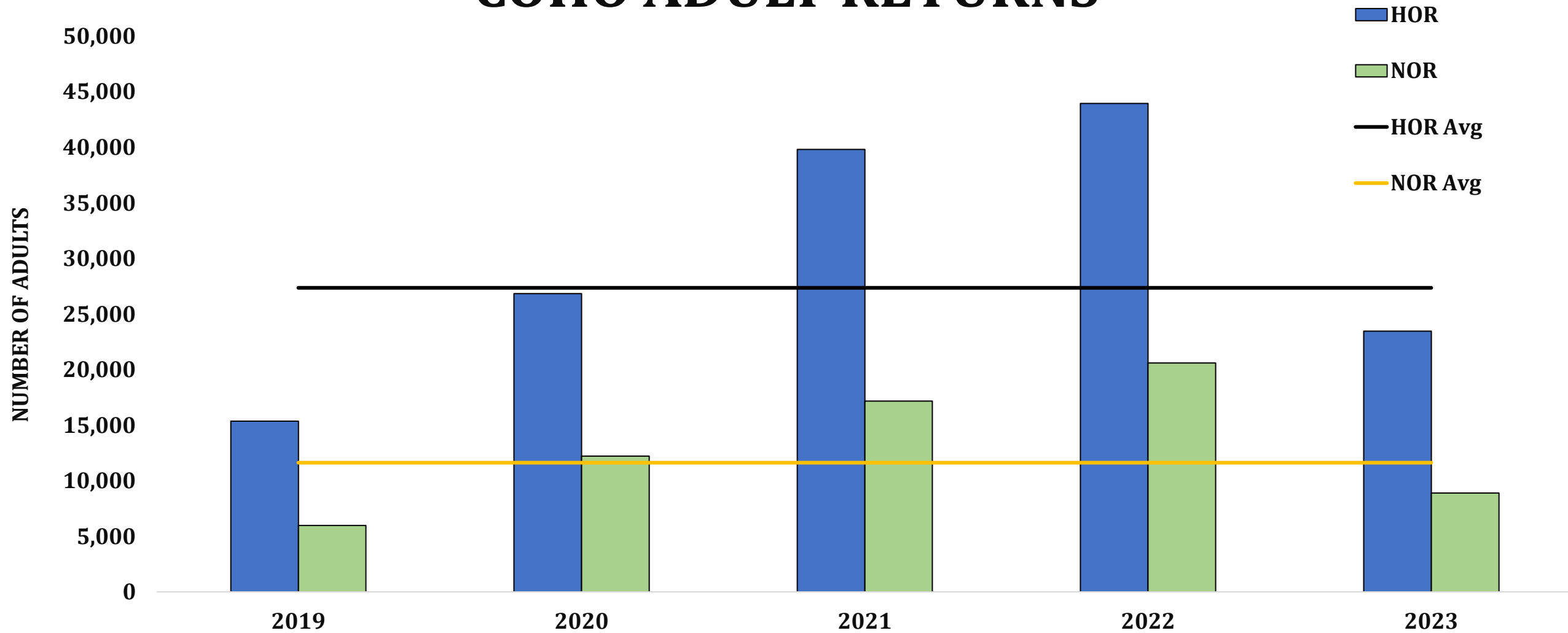
- Total returns to the separator by species, tag, and mark
- Adult Handling Protocol
- Distribution & Release Sites
- Total distribution to each release site by species, tag, and mark



2023 Adult Returns

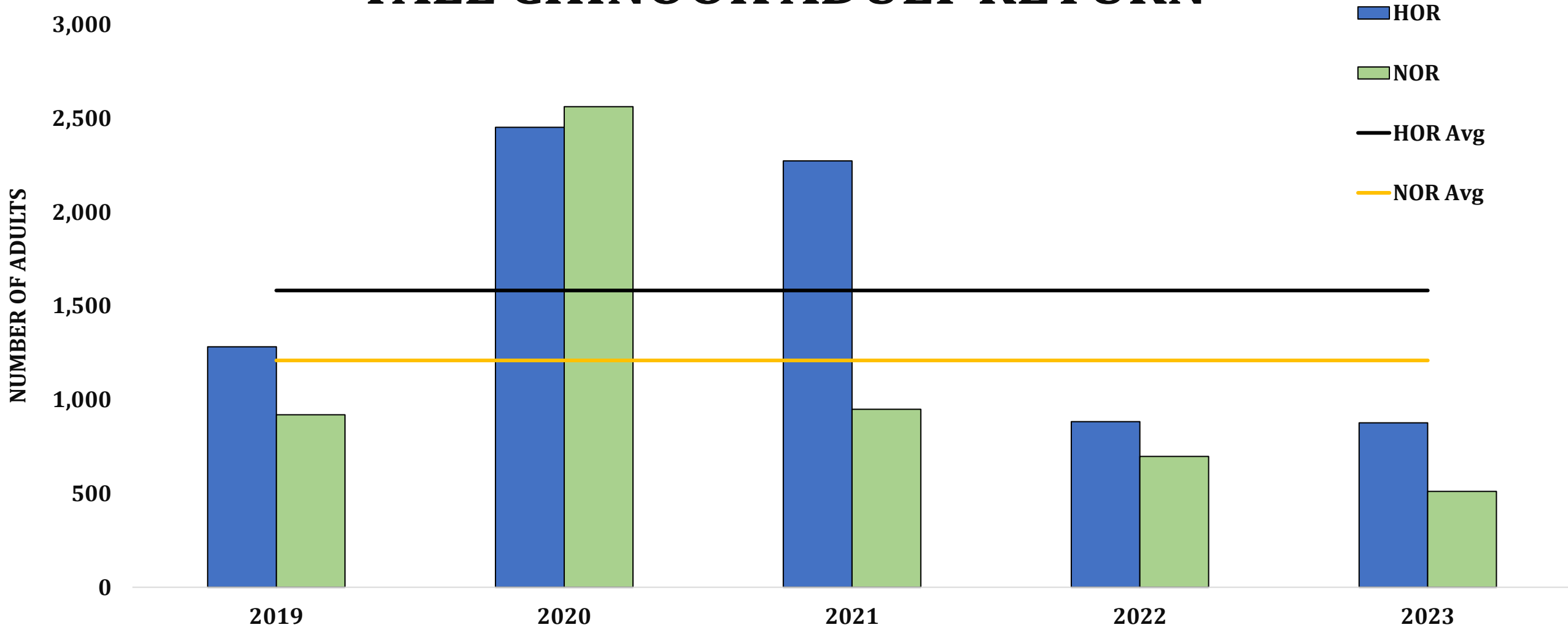


COHO ADULT RETURNS



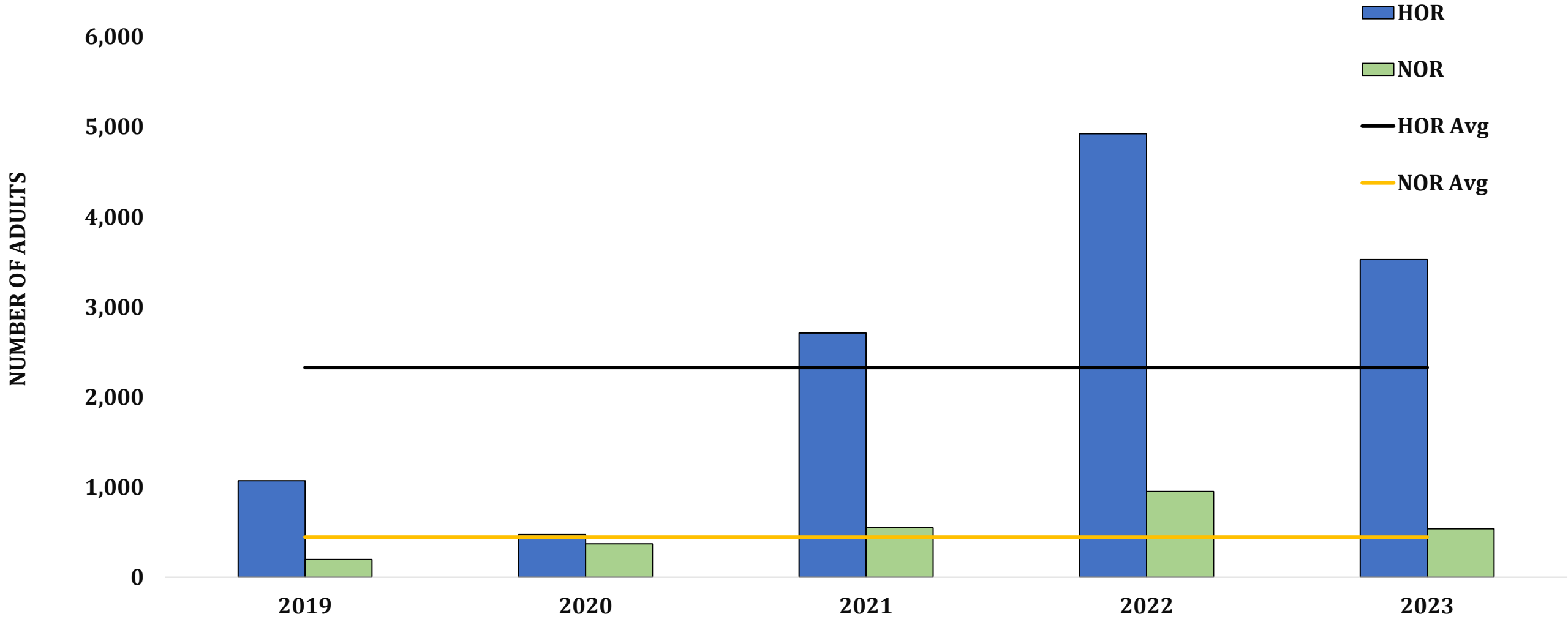
HOR	15,360	26,828	39,797	43,934	23,465
NOR	5,978	12,219	17,163	20,591	8,901

FALL CHINOOK ADULT RETURN



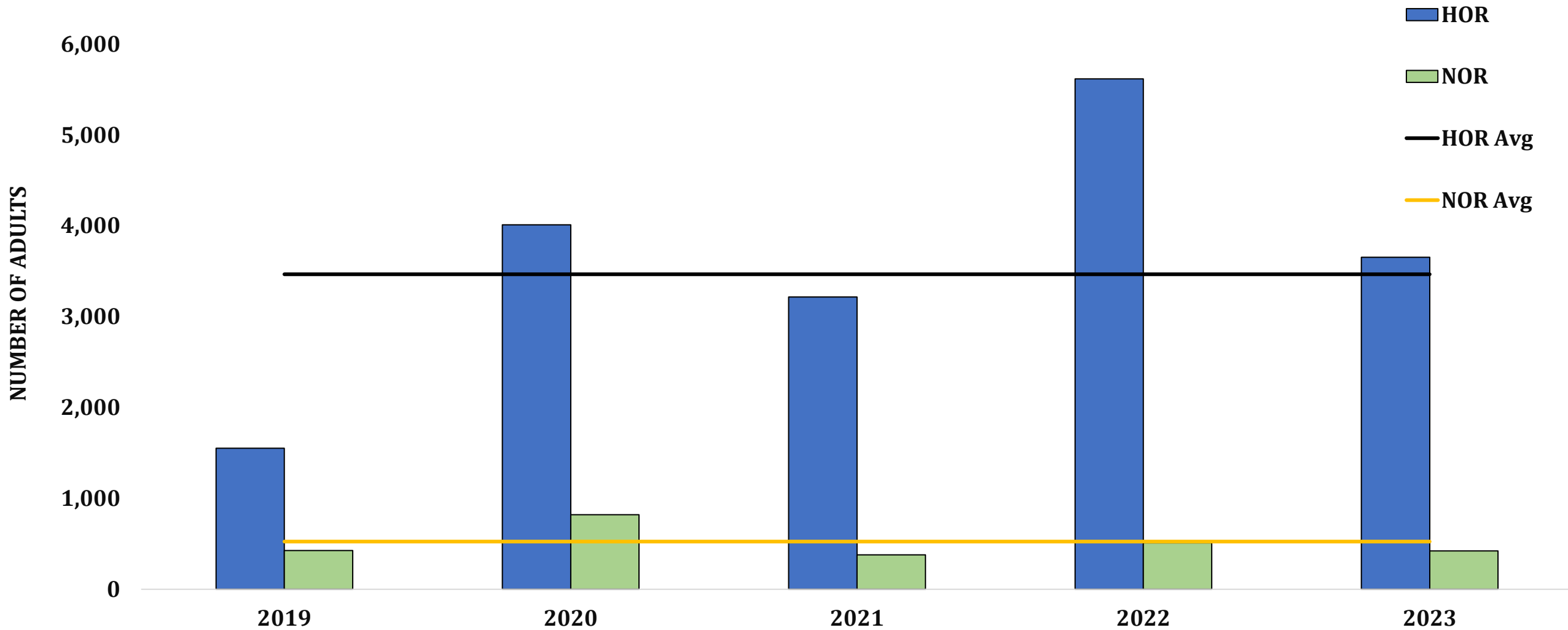
HOR	1,282	2,452	2,273	883	877
NOR	920	2,562	949	698	511

SPRING CHINOOK ADULT RETURNS



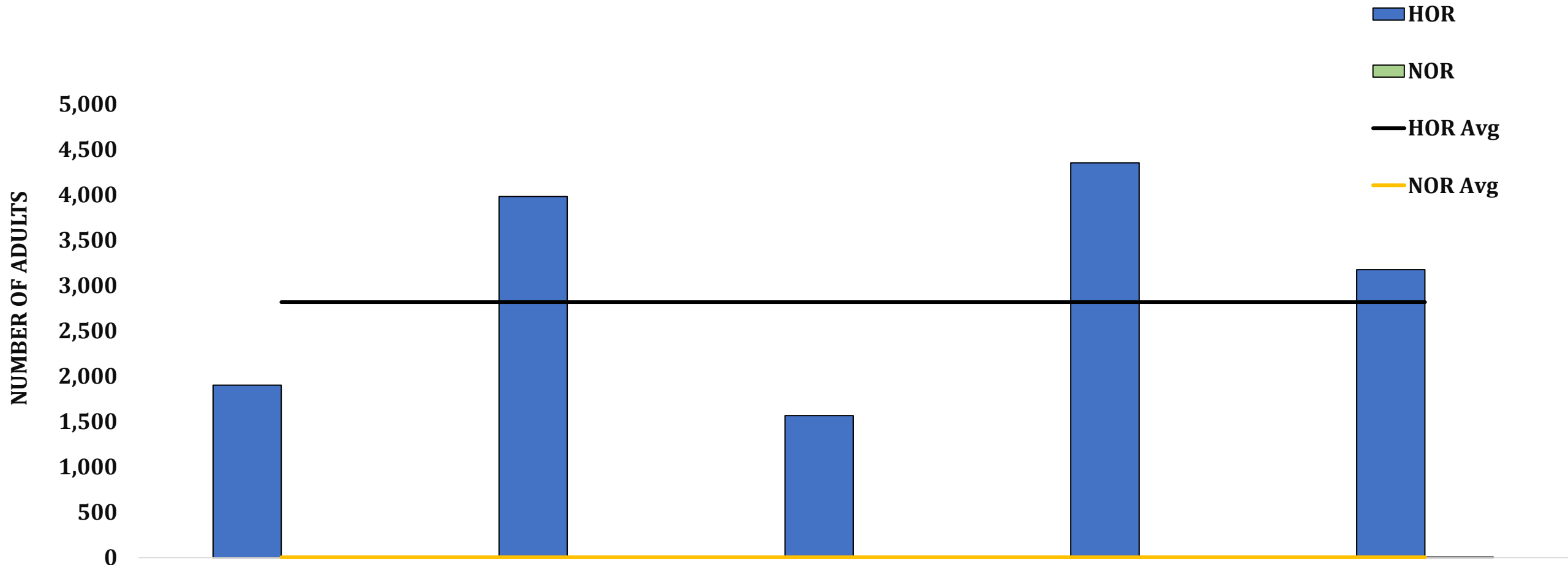
HOR	1,071	473	2,710	4,924	3,526
NOR	196	370	549	950	537

WINTER-RUN STEELHEAD ADULT RETURNS



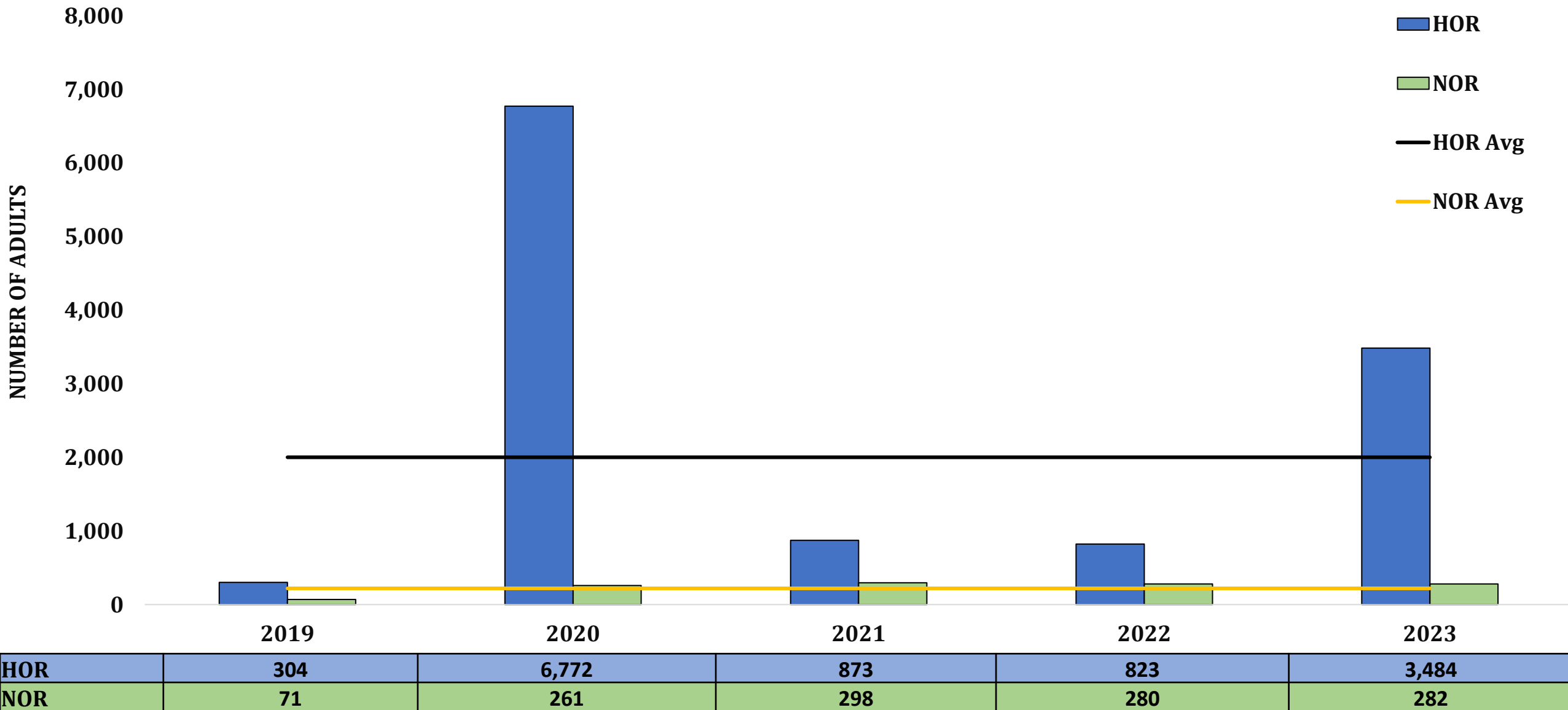
HOR	1,552	4,010	3,217	5,617	3,654
NOR	428	822	379	512	423

SUMMER-RUN STEELHEAD ADULT RETURNS



	2019	2020	2021	2022	2023
HOR	1,900	3,980	1,565	4,351	3,174
NOR	6	3	1	5	4

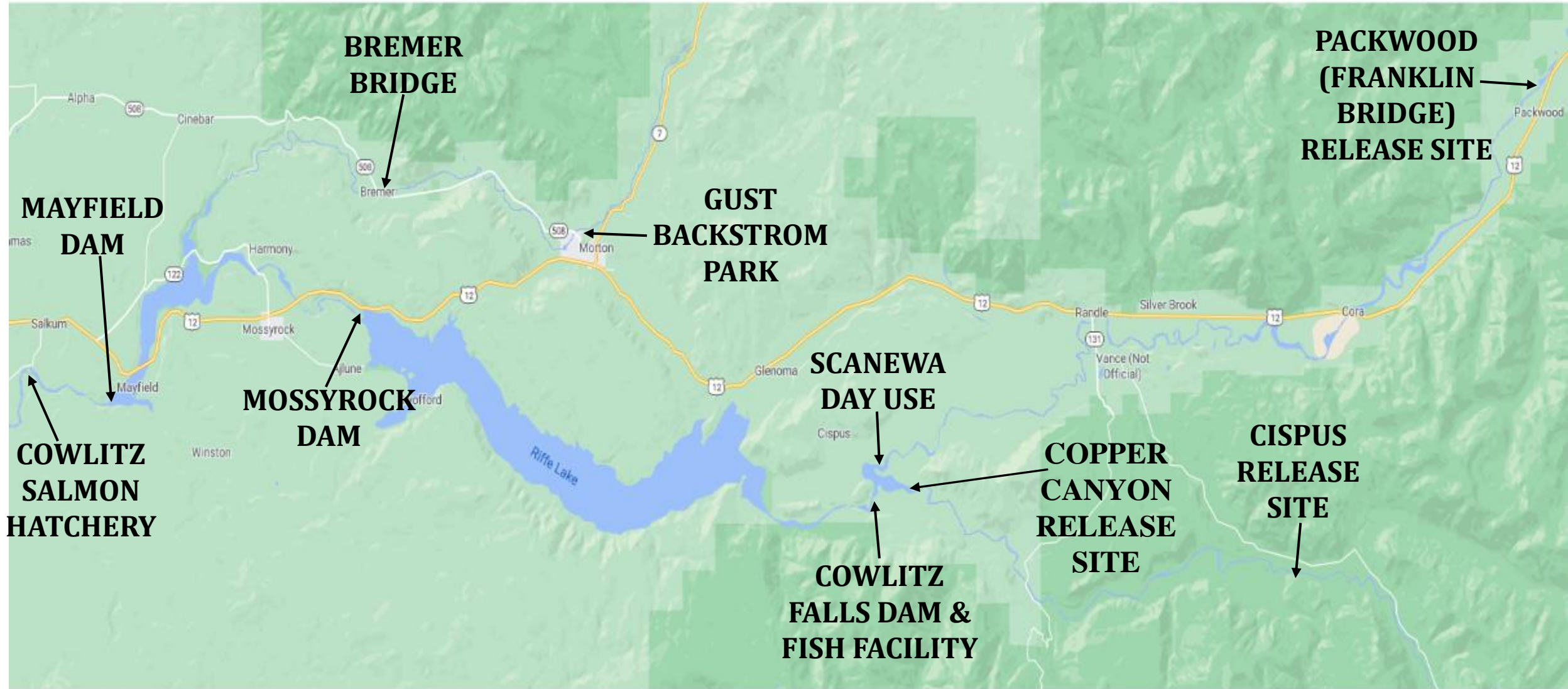
SEA-RUN CUTTHROAT TROUT RETURNS



RELEASE SITES AND DISTRIBUTION



TILTON & UPPER COWLITZ RELEASE SITES



ADULT HANDLING PROTOCOL (AHP)

2/15/2024 Update				DISPOSITION OF ADULTS AND JACKS THAT ARRIVE AT COWLITZ BARRIER DAM ADULT FACILITY							
BY2024	ORIGIN	MARKS IN FISH	LIFESTAGE	RIFFE LAKE	BREMER BR.	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER	
SPRING CHINOOK	Hatchery (HOR)	Ad Clipped Only	Adult & Jack				25% AHN	25% AHN	50% AHN	Broodstock	
	Hatchery (HOR)	UM+CWT	Adult & Jack				25% AHN	25% AHN	50% AHN	Broodstock	
	Hatchery (HOR)	Ad Clip+CWT	Adult & Jack							100%	
	Hatchery (HOR)	Ad Clip+RV	Adult & Jack							Recycle/Surplus	
	Wild (NOR)	Unmarked	Adult & Jack					100%			
	Hatchery (HOR)	All without CWT	Mini Jack	100%							
	Hatchery (HOR)	Ad Clip+CWT	Mini Jack							100%	
	After July 1st, send HOR Sp Chinook upstream and use Copper Canyon Creek Kayak Take-out site to release NOR Sp Chinook into Lake Scanewa.										
	Hatchery (HOR)	Ad Clipped Only	Adult & Jack				50% AHN	50% AHN		Broodstock	
	Hatchery (HOR)	UM+CWT	Adult & Jack				50% AHN	50% AHN		Broodstock	
	Hatchery (HOR)	Ad Clip+CWT	Adult & Jack							100%	
	Hatchery (HOR)	Ad Clip+RV	Adult & Jack							Recycle/Surplus	
	Wild (NOR)	Unmarked	Adult & Jack						100%		
	Hatchery (HOR)	Ad Clip+CWT	Mini Jack							100%	
Hatchery (HOR)	All without CWT	Mini Jack		100%							

**Recycle ADRV fish downstream through the month of June upon communication with NOAA

BY 2024	ORIGIN	MARKS IN FISH	LIFESTAGE	GUST BACK.	BREMER BR.	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER
FALL CHINOOK	Hatchery (HOR)	Ad Clipped Only	Adult & Jack	>75% AHN	<25% AHN				Broodstock	
	Integrated (H/W)	Ad Clipped+CWT	Adult & Jack						100%	
	Wild (NOR)	Unmarked	Adult & Jack		100% / AHN				Collect at a 1:2 *	
	Wild (NOR)	Unmarked+CWT	Adult & Jack		100%					

* Per NOAA approval collect UM fish at less than 1 fish to broodstock, 2 fish to the Tilton River, not to exceed 30% retention to hatchery overall, also meet minimum demographic replacement with HOR Ad only fish. Transport up to 1,600 HOR fall Chinook to the Tilton River. The demographic replacement will be a minimum of 2 HOR fish transported for every 1 NOR fish taken to brood. Fish transported for demographic replacement should be released at Bremmer Bridge.

BY 2024	ORIGIN	MARKS IN FISH	LIFESTAGE	GUST BACK.	BREMER BR.	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER
COHO	Hatchery (HOR)	Ad Clipped Only	Adult & Jack	>75% ²	<25% ²				Broodstock/backfill	
	Integrated (H/W) ¹	Ad Clipped+CWT	Adult & Jack			25%	25%	50% ¹	Broodstock	
	Integrated (H/W) (flow/s)	Ad Clipped+CWT	Adult & Jack			50%	50%			
	Wild (NOR)	Unmarked +CWT	Adult & Jack		All					
	Wild (NOR)	Unmarked	Adult & Jack					100%/AHN ¹	Broodstock	

Maximum HOR coho adult transport of 12,000 to Tilton and 40,000 to Upper Cowlitz

¹ If flow or access conditions do not permit planting adults at Scanewa then plant approximately 50% to Cispus & 50% to Packwood.

² Hatchery fish releases to Bremmer Bridge are intended to occur late in the season to avoid attracting anglers to the Bremmer Bridge site during low water.

BY 2024	ORIGIN	MARKS IN FISH	LIFESTAGE	GUST BACK.	BREMER BR.	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER
ANADROMOUS COASTAL CUTTHROAT	Hatchery (HOR)	Ad Clipped Only							Per brood schedule	100% AHN *
	Wild (NOR)	Unmarked			100%					
	Wild (NOR)	UM+Dorsal CWT			100%					
	Wild (NOR)	Unmarked +CWT						100%		

All hatchery fish mass marked.

* Caudal clip recycled fish.

³ See NOTES tab. - Cispus preferred when Scanewa not available.

BY 2024	ORIGIN	MARKS IN FISH	LIFESTAGE	GUST BACK.	BREMER BR.	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER
WINTER STEELHEAD	Hatchery (HOR)	Ad Clipped Only							All	
	Integrated (H/W)	AD+CWT				50% AHN	50% AHN		Broodstock	
	Integrated (H/W)	AD+LV (Tilton)		>75% AHN	<25% AHN				Broodstock	
	Wild (NOR)	UM+Dorsal CWT			100% AHN				Broodstock	
	Wild (NOR)	Unmarked +CWT						100%/AHN ¹	Broodstock	
	Wild (NOR)	Unmarked				100% AHN			Broodstock	

¹ If flow or access conditions do not permit planting adults at Scanewa then plant approximately 50% to Cispus & 50% to Packwood.

BY 2024	ORIGIN	MARKS IN FISH	LIFESTAGE	TILTON	PACKWOOD	CISPUS R. ³	SCANEWA	RETAIN AT HATCHERY	LOWER RIVER
SUMMER STEELHEAD	Hatchery Origin	Ad Clipped						100% *	6,600 *
	Wild (NOR)	Unmarked							100%

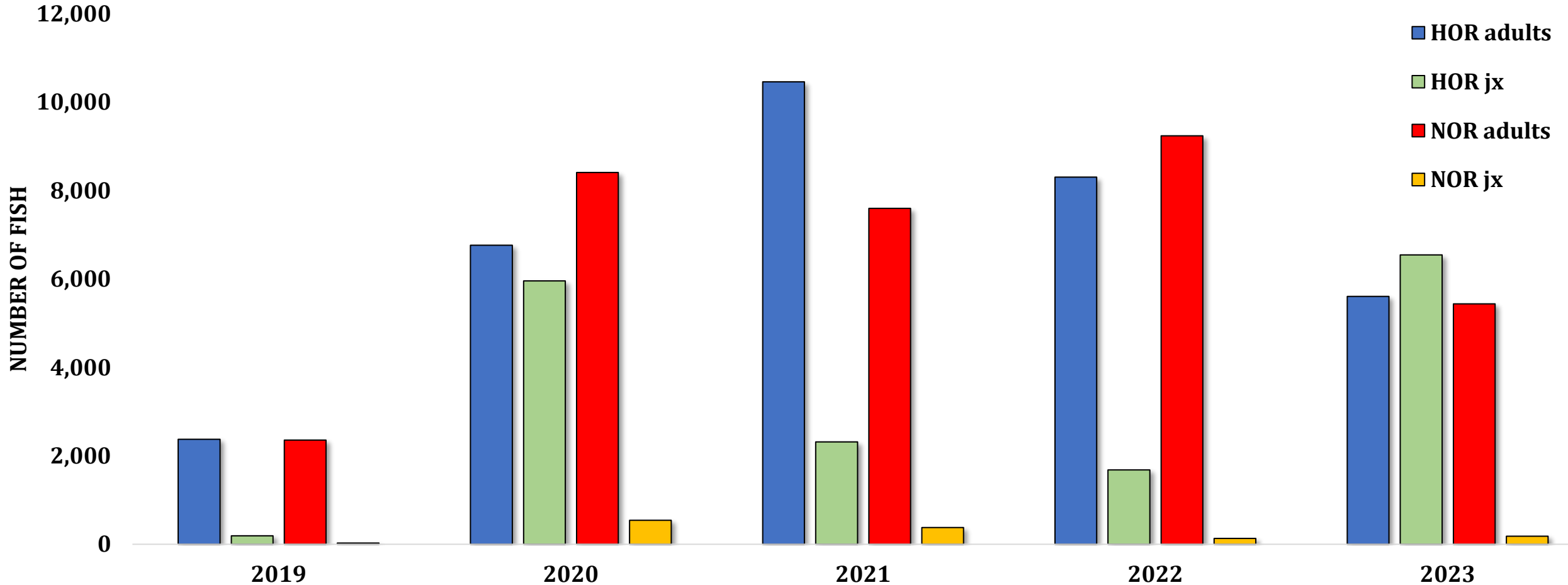
All hatchery fish mass marked.

* Final disposition to be determined by Fish Management annually. Fish may be donated to food banks, planted in other lakes etc....

² Fish will be opercal punched and recycled downstream from June 1st-Aug 31th. Approx. 200 fish per week to I-5 boat launch PENDING FISH MANAGEMENT/FTC review/modification.

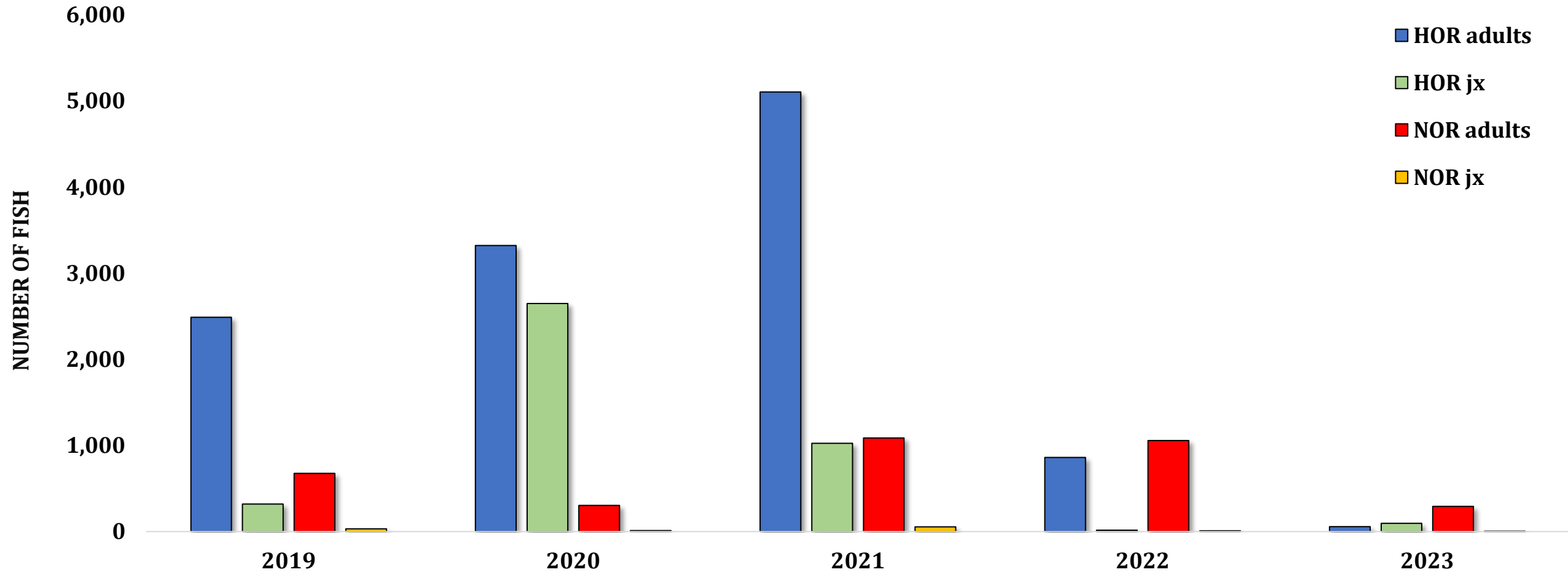
³ The Cispus River adult release site is under repair. Until repaired, useable or alternative is found, release fish destined for the Cispus to Lake Scanewa.

COHO SCANEWA RELEASES (UCR)



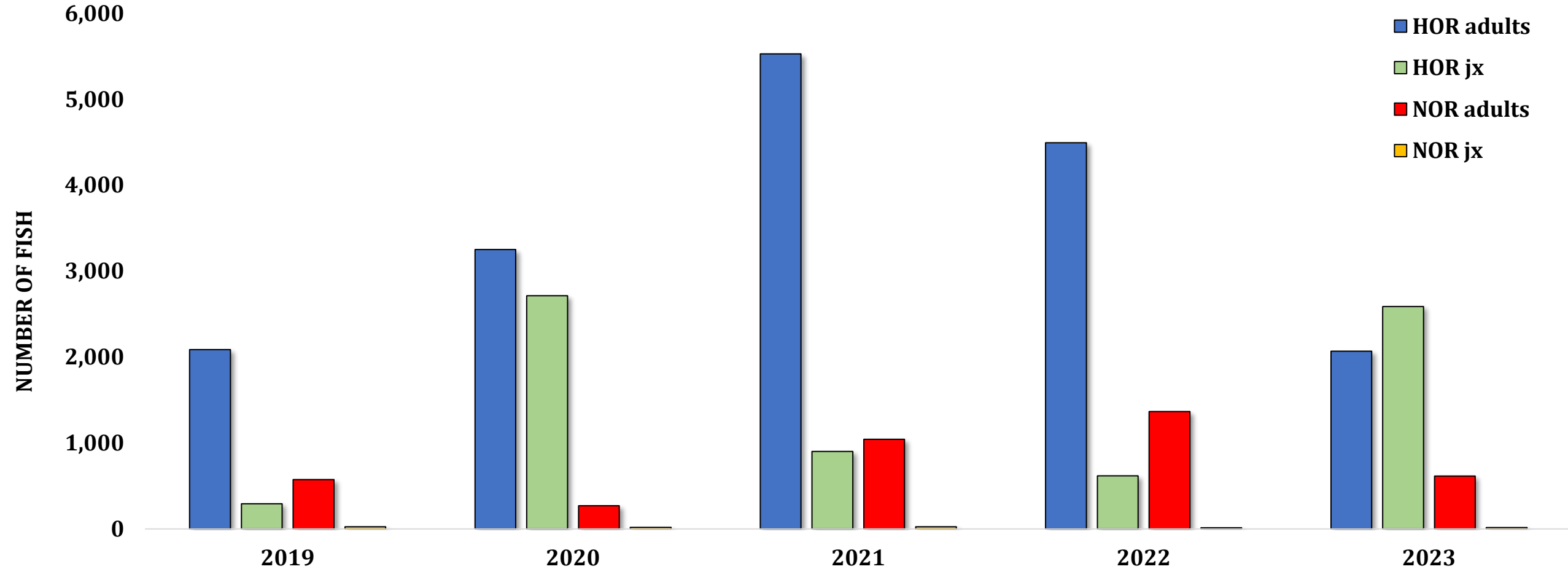
HOR Adults	2,372	6,761	10,457	8,302	5,603
HOR Jx	191	5,953	2,314	1,681	6,543
NOR Adults	2,355	8,406	7,597	9,238	5,435
NOR Jx	27	542	376	131	180

COHO Copies PUS Anyon RELEASES (UCR)



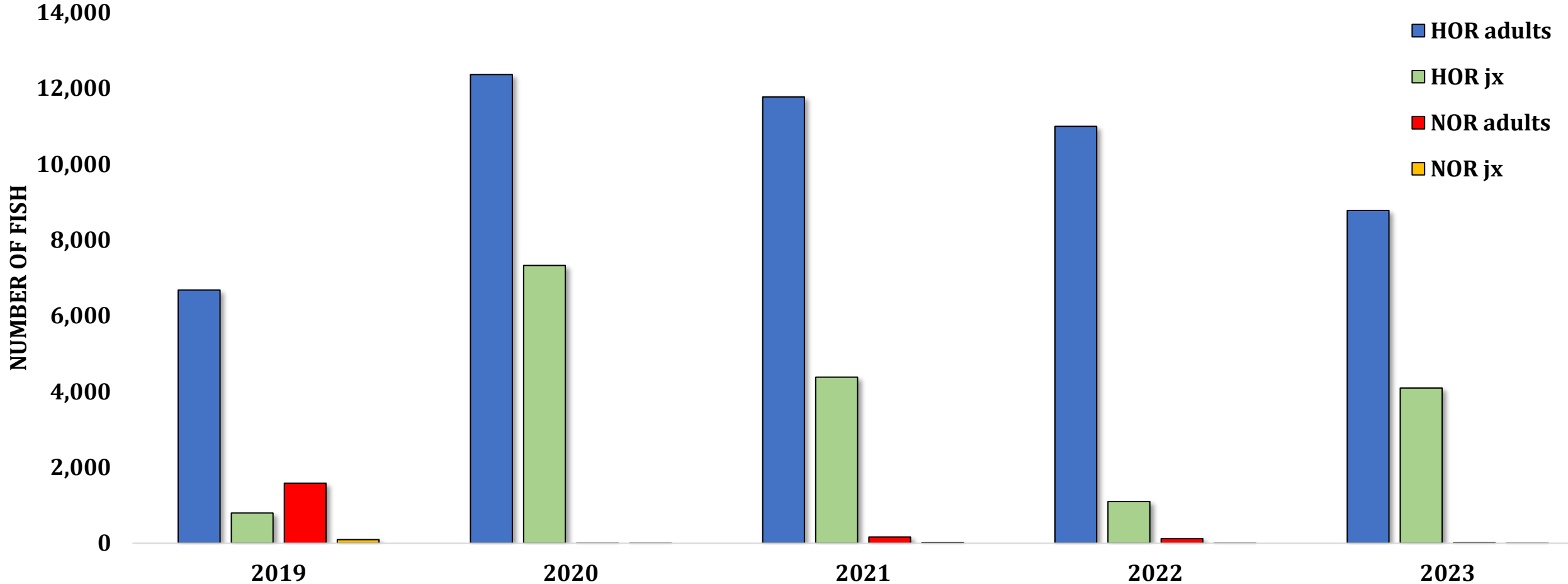
	2019	2020	2021	2022	2023
HOR Adults	2,488	3,321	5,105	861	433
HOR Jx	319	2,647	1,025	17	885
NOR Adults	676	304	1,086	1,056	526
NOR Jx	32	11	54	8	19

COHO PACKWOOD RELEASES (UCR)



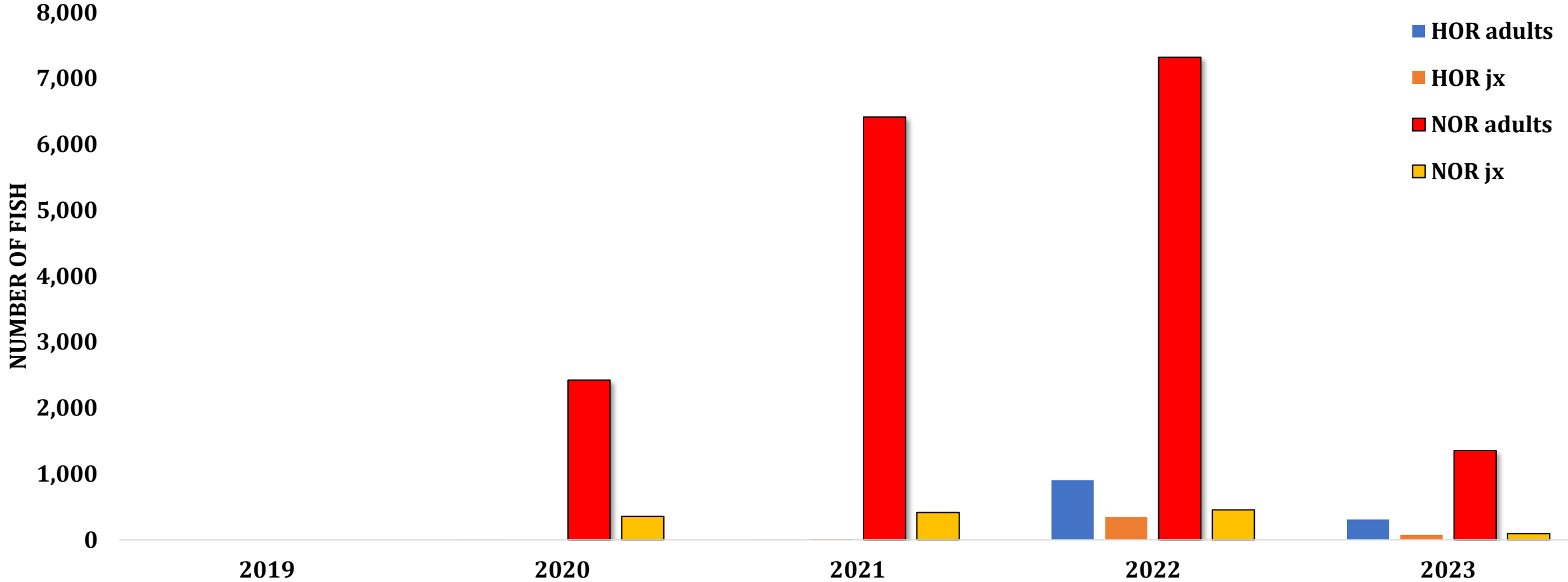
HOR Adults	2,088	3,251	5,527	4,493	2,069
HOR Jx	293	2,713	902	619	2,589
NOR Adults	574	270	1,043	1,367	615
NOR Jx	27	19	26	14	17

COHO GUST BACKSTROM RELEASES (TIL)



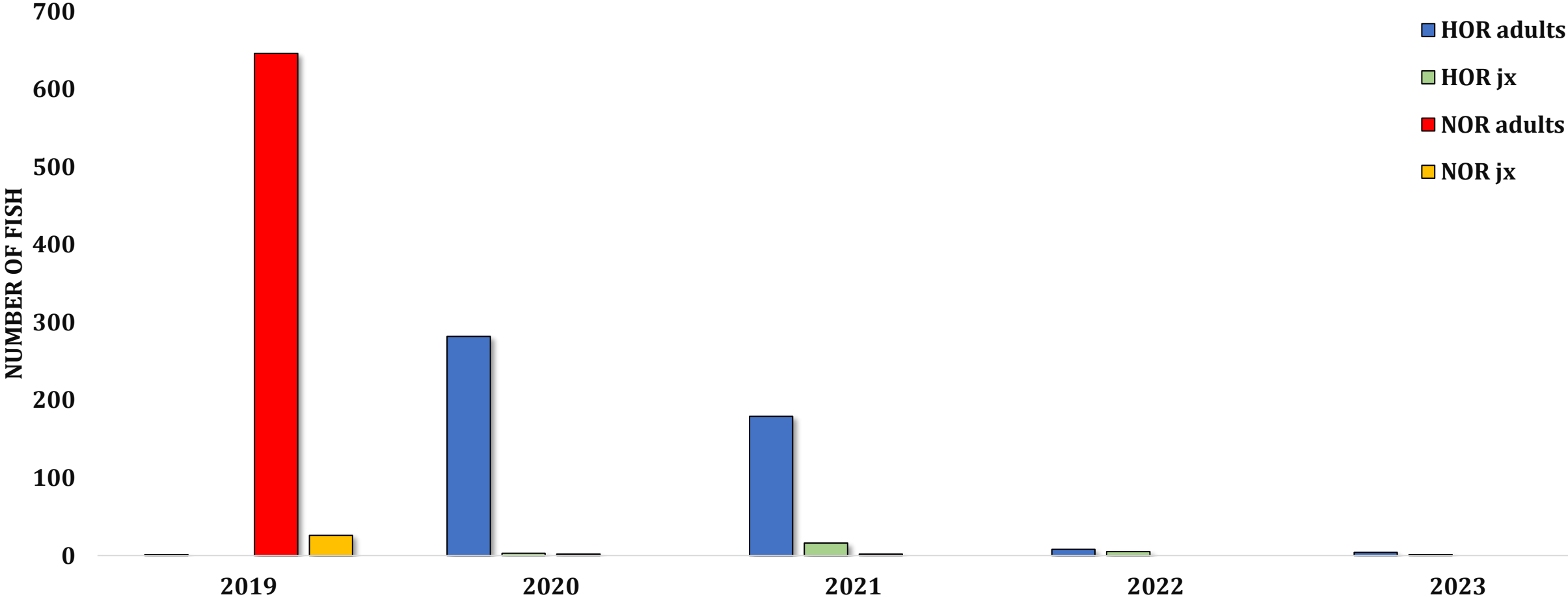
	2019	2020	2021	2022	2023
HOR Adults	6,676	12,358	11,769	10,993	8,777
HOR Jx	798	7,324	4,379	1,099	4,091
NOR Adults	1,582	2	165	119	12
NOR Jx	95	1	19	4	2

COHO BREMER BRIDGE (TILTON) RELEASES



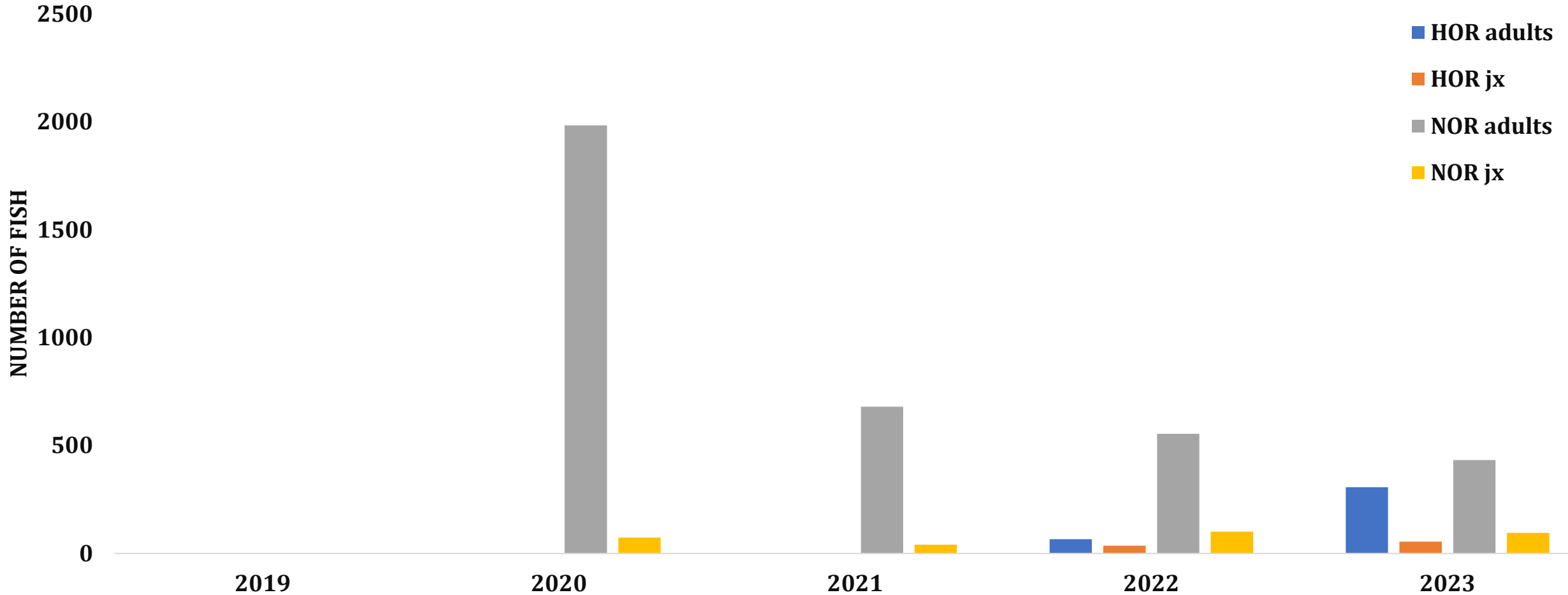
HOR Adults	0	4	6	902	306
HOR Jx	0	0	11	342	74
NOR Adults	0	2,419	6,412	7,321	1,354
NOR Jx	0	353	412	453	90

FALL CHINOOK GUST BACKSTROM (TILTON) RELEASES



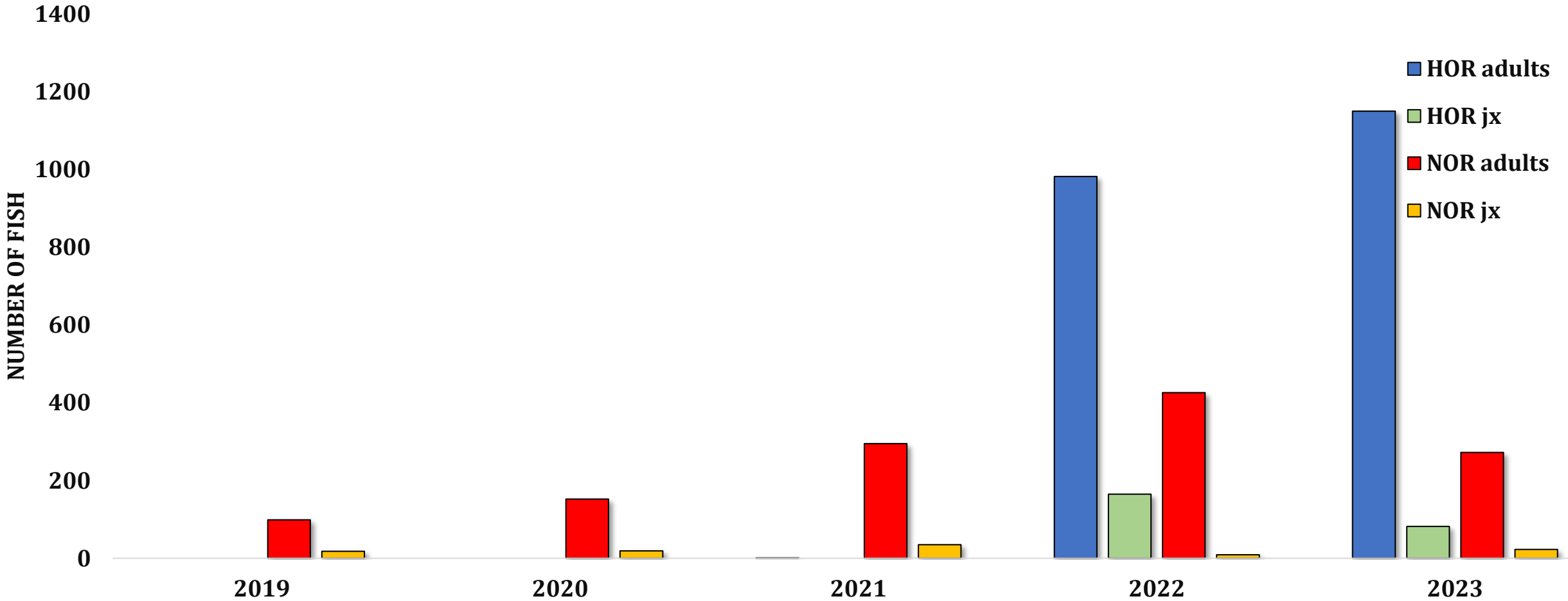
	2019	2020	2021	2022	2023
HOR Adults	1	282	179	8	4
HOR Jx	0	3	16	5	1
NOR Adults	646	2	2	0	0
NOR Jx	26	0	0	0	0

FALL CHINOOK BREMER BRIDGE (TILTON) RELEASES



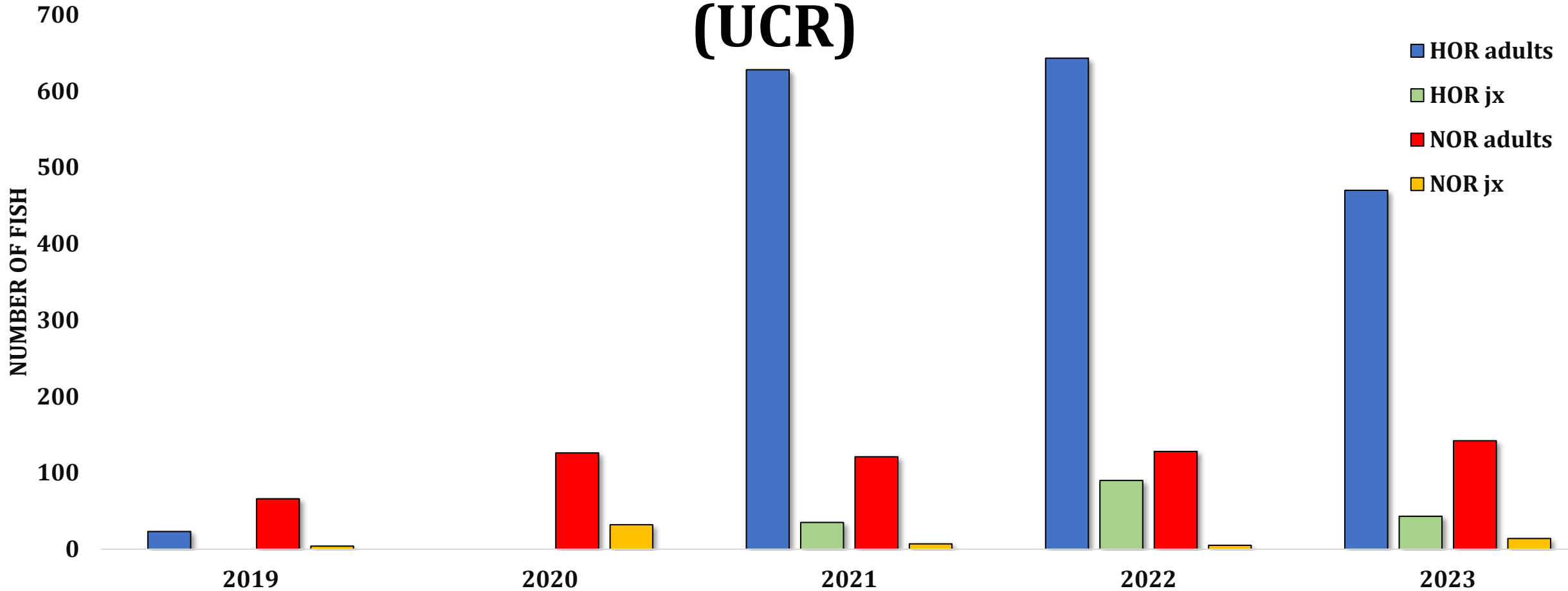
	2019	2020	2021	2022	2023
HOR Adults	0	0	1	66	307
HOR Jx	0	0	0	36	54
NOR Adults	0	1,983	680	554	432
NOR Jx	0	73	40	101	95

SPRING CHINOOK SCANEWA RELEASES(UCR)



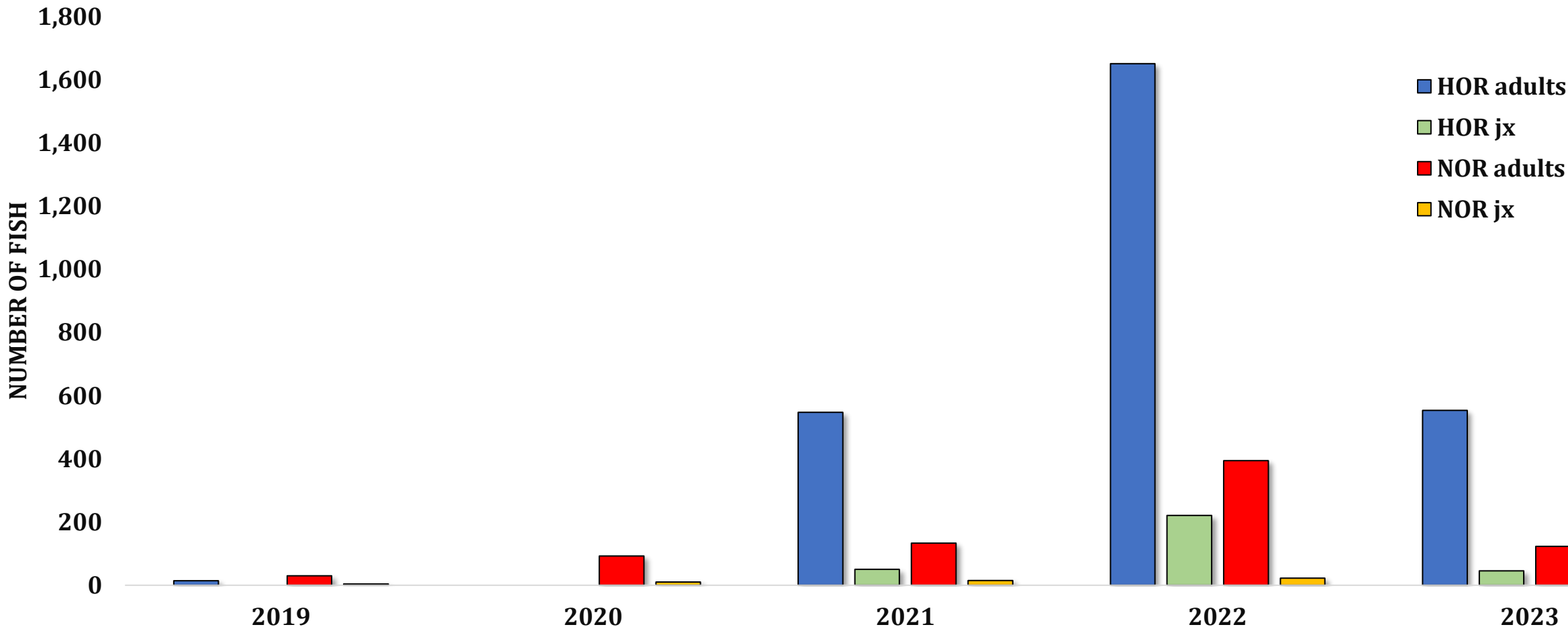
	2019	2020	2021	2022	2023
HOR Adults	0	0	1	982	1,150
HOR Jx	0	0	0	165	82
NOR Adults	99	152	295	426	272
NOR Jx	18	19	35	9	23

SPRING CHINOOK CISPUS/COPPER CANYON RELEASES (UCR)



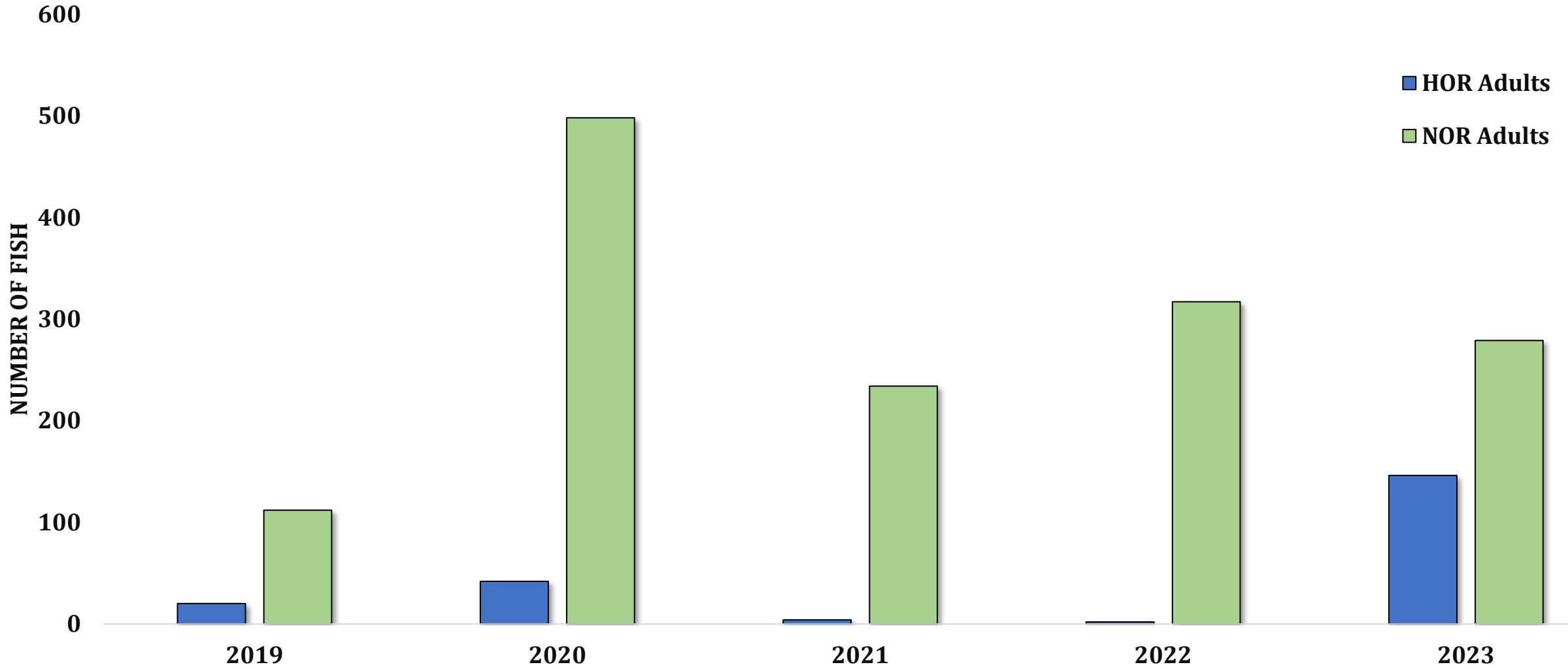
HOR Adults	23	0	628	643	470
HOR Jx	0	0	35	90	43
NOR Adults	66	126	121	128	142
NOR Jx	4	32	7	5	14

SPRING CHINOOK PACKWOOD RELEASES (UCR)



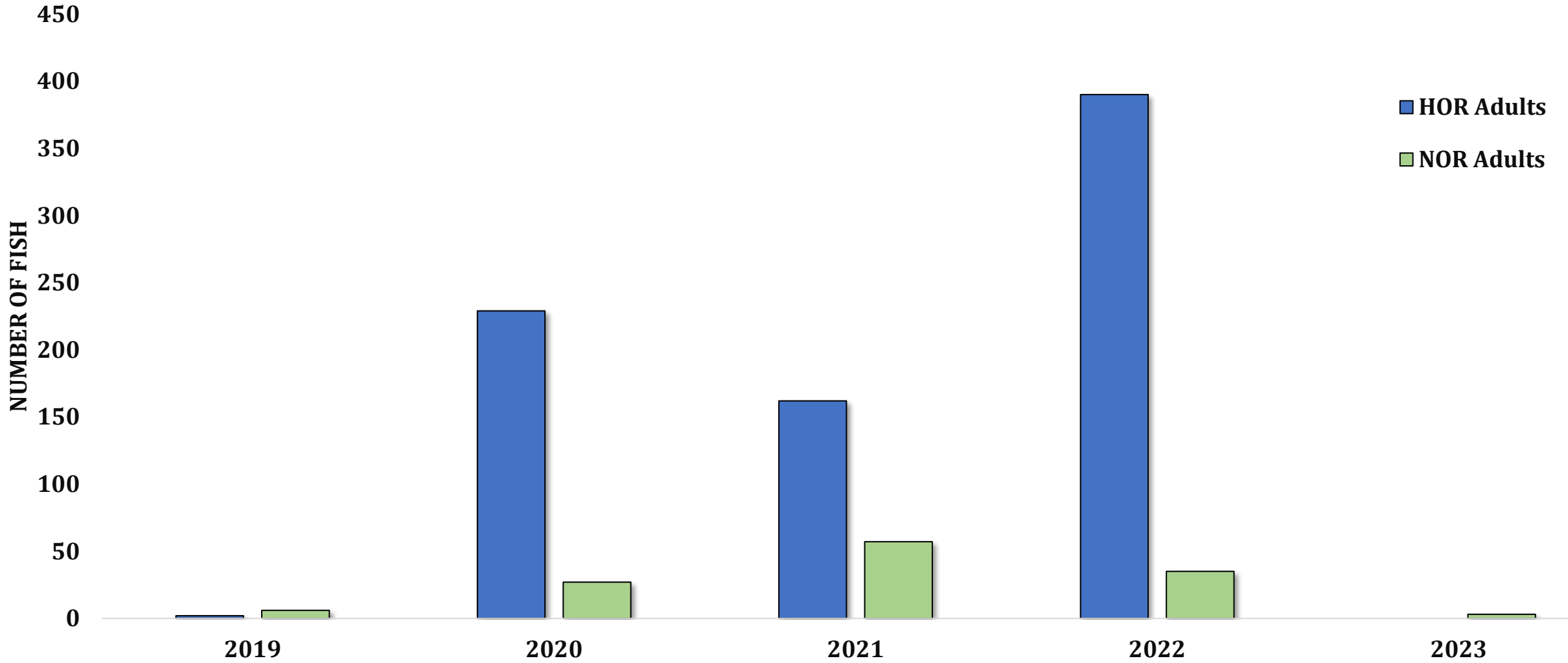
HOR Adults	14	0	547	1,651	553
HOR Jx	0	0	50	221	45
NOR Adults	30	92	133	394	123
NOR Jx	4	10	15	22	19

WINTER-RUN STEELHEAD SCANEWA (UCR)



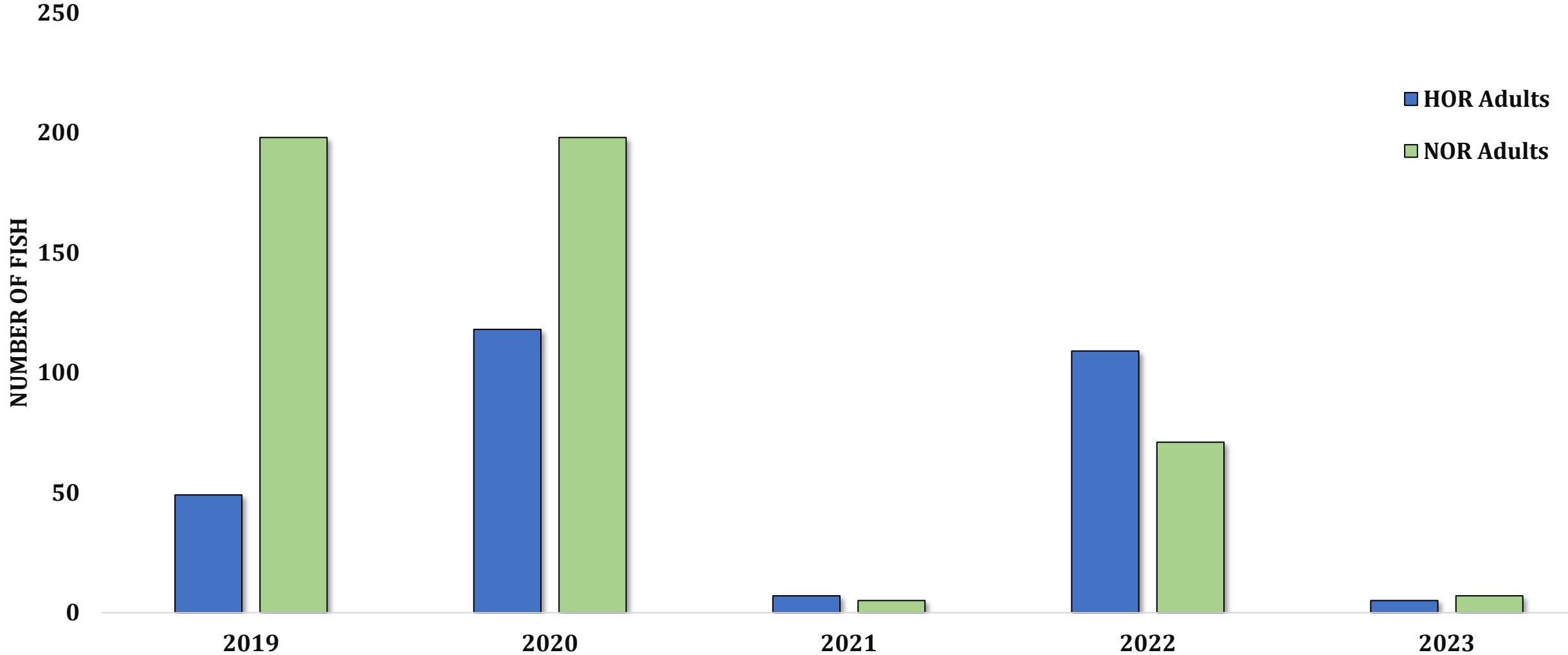
HOR Adults	20	42	4	2	146
NOR Adults	112	498	234	317	279

WINTER-RUN STEELHEAD CISPUS RELEASES (UCR)



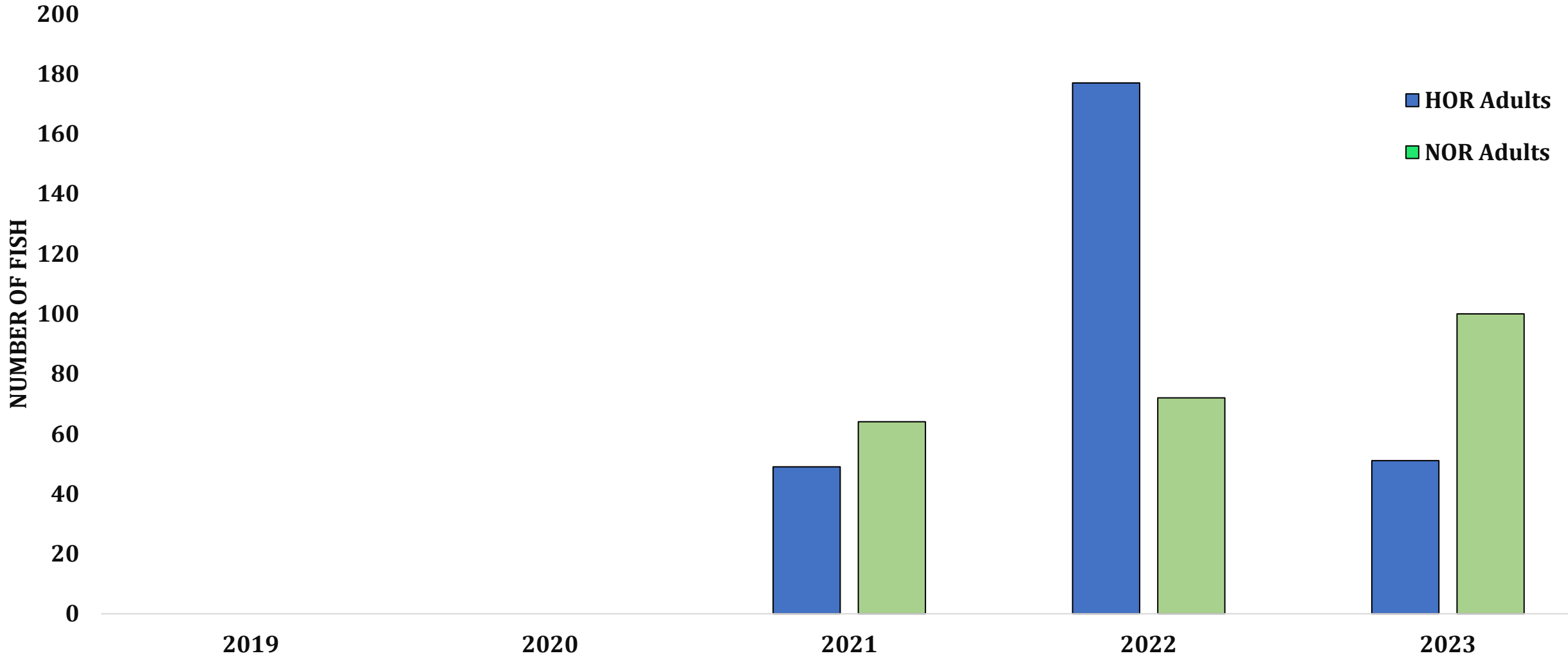
HOR Adults	73	185	2	229	162
NOR Adults	153	31	6	27	57

WINTER-RUN STEELHEAD GUST BACKSTROM (TILTON)



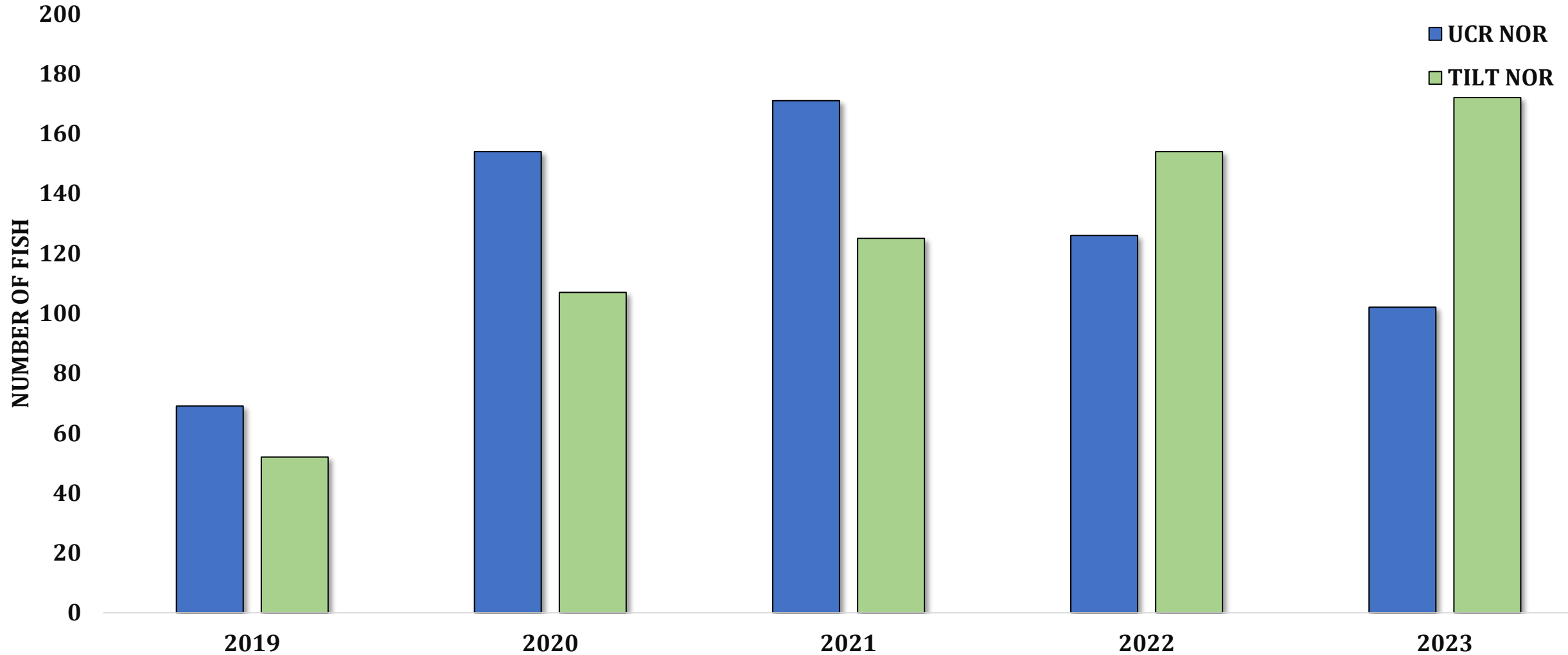
HOR Adults	49	118	7	109	5
NOR Adults	198	198	5	71	7

WINTER-RUN STEELHEAD BREMER BRIDGE (TILTON)



HOR Adults	0	0	49	177	51
NOR Adults	0	0	64	72	100

SEA-RUN CUTTHROAT RELEASES



UCR Adults	69	154	171	126	102
TILT Adults	52	107	125	154	172

Cowlitz Fish Report

August 26, 2024

Last week, Tacoma Power employees recovered 160 summer-run steelhead adults, 264 spring Chinook adults, 23 spring Chinook jacks, 148 spring Chinook mini jacks, 25 fall Chinook adults, two fall Chinook jacks, 14 cutthroat trout, two coho adults, and one coho jack over five days of operations at the Cowlitz Salmon Hatchery separator.

During the past week, Tacoma Power employees released 146 spring Chinook adults, six spring Chinook jacks, and 10 cutthroat trout into Lake Scanewa at Copper Canyon and they released 42 spring Chinook adults and nine spring Chinook jacks at Franklin Bridge in Packwood.

Tacoma Power released 23 fall Chinook adults, three coho adults, and one cutthroat trout to the Tilton River near Morton.

As of Friday, August 26, Tacoma Power has recycled a total of 4,602 summer-run steelhead and 806 spring Chinook to the I-5 boat launch below Toledo.

River flow below Mayfield Dam is 3,000 cubic feet per second on Monday, August 26, 2024. Water visibility is 10 feet and water temperature is 53.6. River flows could change at any time so boaters and anglers should remain alert for this possibility.

Get information about river flows and lake levels at [MyTPU.org/LakeLevels](https://www.mytpu.org/LakeLevels).

Would you like to receive updates about the Cowlitz River Project? [Click here](#) to sign up for our email list.

Questions? Please email cowlitz@cityoftacoma.org.

Cowlitz Fish Stats:

Graphs of adult returns by species for each week and 10-year averages.

Tables of collections by species for each week, season to date and weekly 5-year averages.

www.mytpu.org/cowlitz-fish-report

Cowlitz Fish Report - Table and Charts

2023-2024 Adult Collection Totals

NOTE: The "Total Returns" are the total number of adults that were collected at the Cowlitz Salmon Hatchery Adult Separator.

Coho																	
Run Timing: August 2024-February 2025			Upstream Transportation														
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Cispus		Lower Cowlitz		Broodstock		Surplus	Mortality
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural
Season to date	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Weekly 5-Year Average	0	0	0														
Season 5-Yr. Average to Date	0	0	0														

Spring Chinook																			
Run Timing: March 2024-October 2024			Upstream Transportation																
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Copper Canyon		Lower Cowlitz		Broodstock		Surplus	Mortality	WDFW Give Away	
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	
Season to date	6,135	5,817	318	0	0	1,772	179	1,039	0	992	138	806	0	1,372	0	390	0	1	1
23-Aug	264	236	28	0	0	0	0	42	0	118	28	0	0	30	0	79	0	0	0
Weekly 5-Year Average	30	24	6																
Season 5-Yr. Average to Date	2,878	2,408	470																

Fall Chinook																			
Run Timing: August 2023-December 2023			Upstream Transportation																
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Cispus River		Lower Cowlitz		Broodstock		Surplus	Mortality		
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural		
Season to date	48	13	35	11	27	0	0	0	0	0	0	0	0	2	8	0	0	0	0
23-Aug	25	9	16	9	13	0	0	0	0	0	0	0	0	0	3	0	0	0	0
Weekly 5-Year Average	15	6	9																
Season 5-Yr. Average to Date	37	12	25																

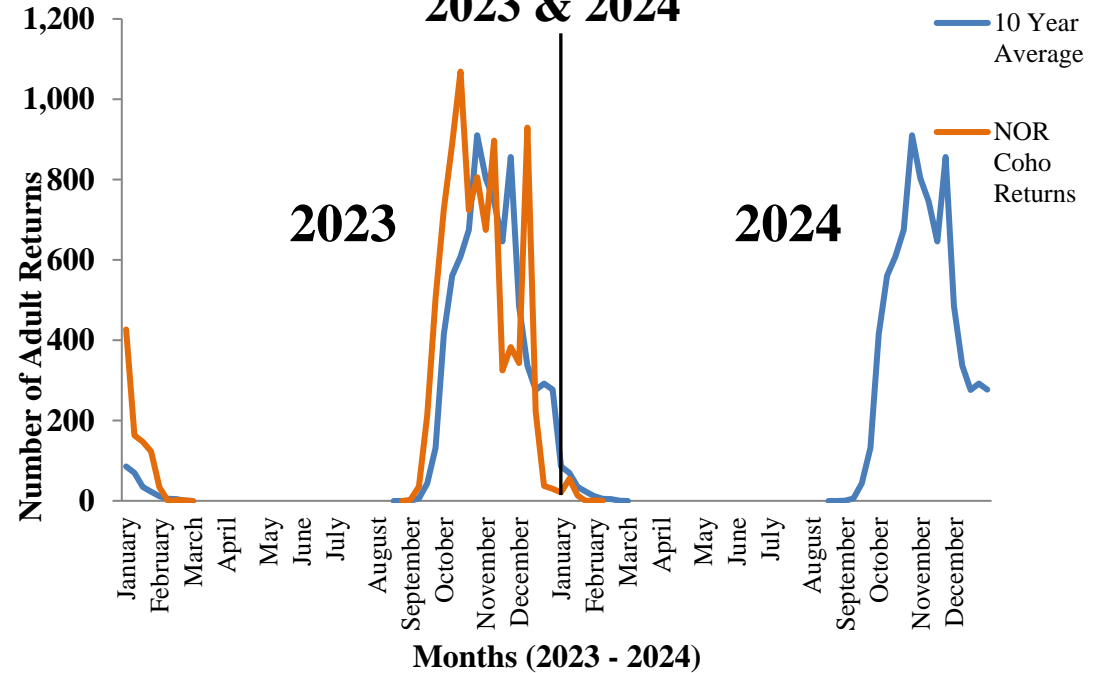
Winter-Run Steelhead																			
Run Timing: November 2023-July 2024			Upstream Transportation																
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Cispus River		Lower Cowlitz		Broodstock		Surplus	Mortality		
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural		
Season to date	3,423	2,644	779	133	342	89	325	26	40	0	0	0	0	483	72	1,913	0	0	0
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weekly 5-Year Average	0	0	0																
Season 5-Yr. Average to Date	4,093	3,590	503																

Summer-Run Steelhead																			
Run Timing: April 2024-January 2025			Upstream Transportation																
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Cispus River		Lower Cowlitz		Broodstock		Surplus	Mortality		
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural		
Season to date	5,355	5,353	2	0	0	0	0	0	0	0	0	4,602	2	722	0	1,733	0	0	0
23-Aug	160	160	0	0	0	0	0	0	0	0	0	106	0	54	0	89	0	0	0
Weekly 5-Year Average	115	115	0																
Season 5-Yr. Average to Date	2,590	2,589	1																

Cutthroat Trout																			
Run Timing: January 2024-December 2024			Upstream Transportation																
Week Ending	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Copper Canyon		Lower Cowlitz		Broodstock		Surplus	Mortality		
	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural		
Season to date	45	11	34	0	8	0	2	0	0	0	0	27	11	0	0	0	0	0	0
23-Aug	14	3	11	0	1	0	0	0	0	0	10	3	0	0	0	0	0	0	0
Weekly 5-Year Average	24	11	13																
Season 5-Yr. Average to Date	102	27	75																

Returning Adults to the Cowlitz Salmon Hatchery Separator through August 23, 2024

Natural Origin Coho Adult Returns for 2023 & 2024



www.mytpu.org/cowlitz-fish-report

QUESTIONS?