

Review of 2021 Salmon Spawner Escapements and 2022 Coho and Chinook Abundance Forecasts

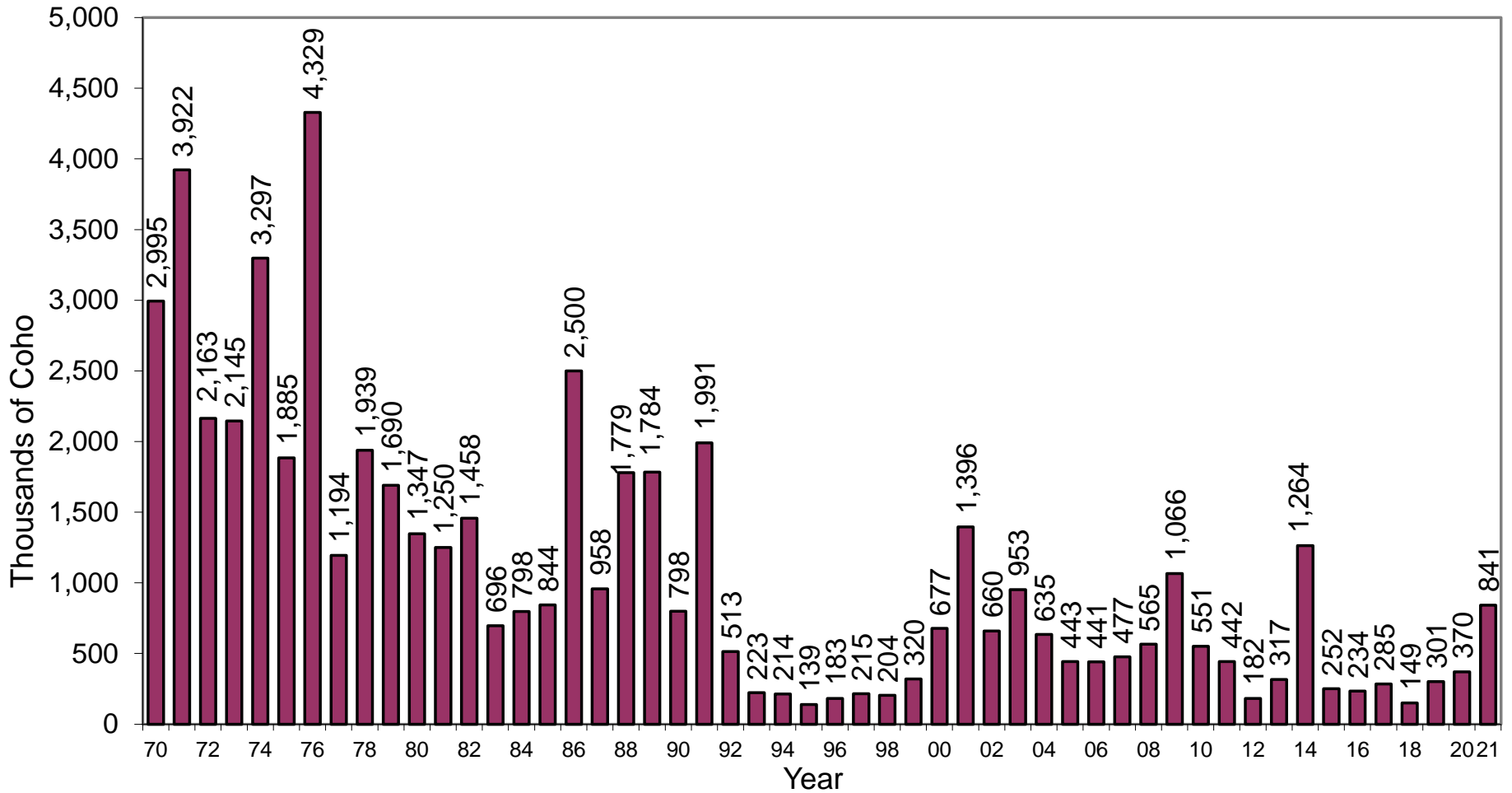
2022 Ocean Salmon Fishery Process Schedule

Feb. 28	ODFW Ocean Salmon Public Meeting	Virtual
Mar. 2	CDFW Ocean Salmon Public Meeting	Virtual
Mar. 4	WDFW Ocean Salmon Public Meeting	Virtual
Mar. 8-14	Pacific Fishery Management Council: * Develop and adopt 2022 salmon season alternatives for public review	San Jose, CA
Mar. 16	North of Falcon 1 (public meeting): * Ocean / Puget S. / Col. R. salmon season negotiations	TBD
Mar. 18	Oregon Fish and Wildlife Commission meeting: * Ocean Salmon (informational only)	Virtual
Mar. 22	PFMC Ocean Salmon Public Hearing: California	Eureka, CA
Mar. 22	PFMC Ocean Salmon Public Hearing: Washington	Westport, WA
Mar. 23	PFMC Ocean Salmon Public Hearing: Oregon	Coos Bay, OR
April 1	North of Falcon (public meeting): * Ocean / Columbia R.	Virtual
April 6-13	Pacific Fishery Management Council: * Adopt 2022 ocean salmon season regulations	Seattle, WA
April 22	Oregon Fish and Wildlife Commission meeting: * Adopt 2022 ocean salmon seasons for state waters	Virtual

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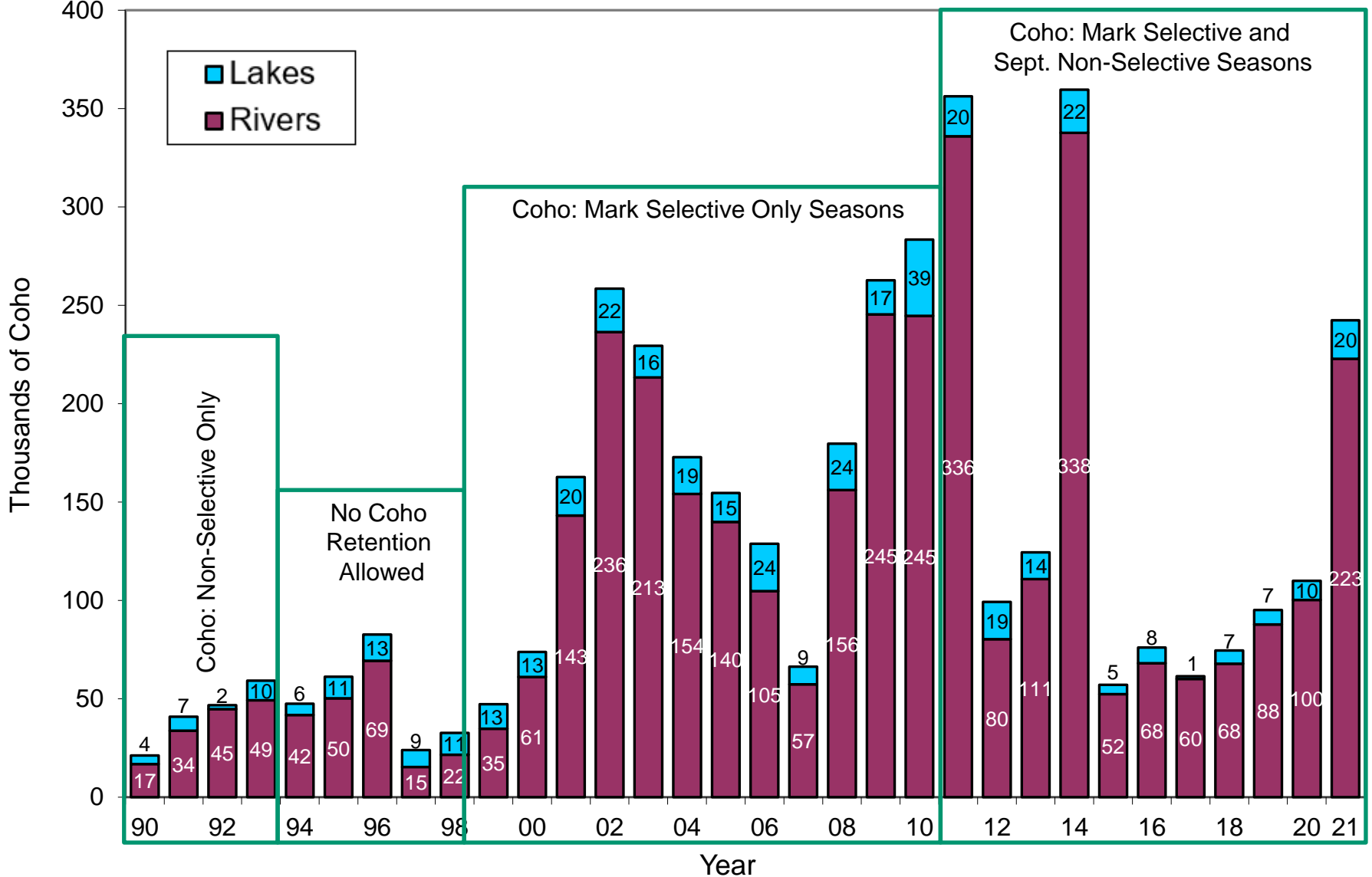
- Oregon Production Index (OPI) Coho
- Oregon Coastal Natural (OCN)
- Lower Columbia River Natural (LCN)
- Columbia River Chinook
- Klamath River Fall Chinook
- Sacramento River Fall Chinook

Oregon Production Index Area Hatchery Coho Abundance Estimates, 1970-2021



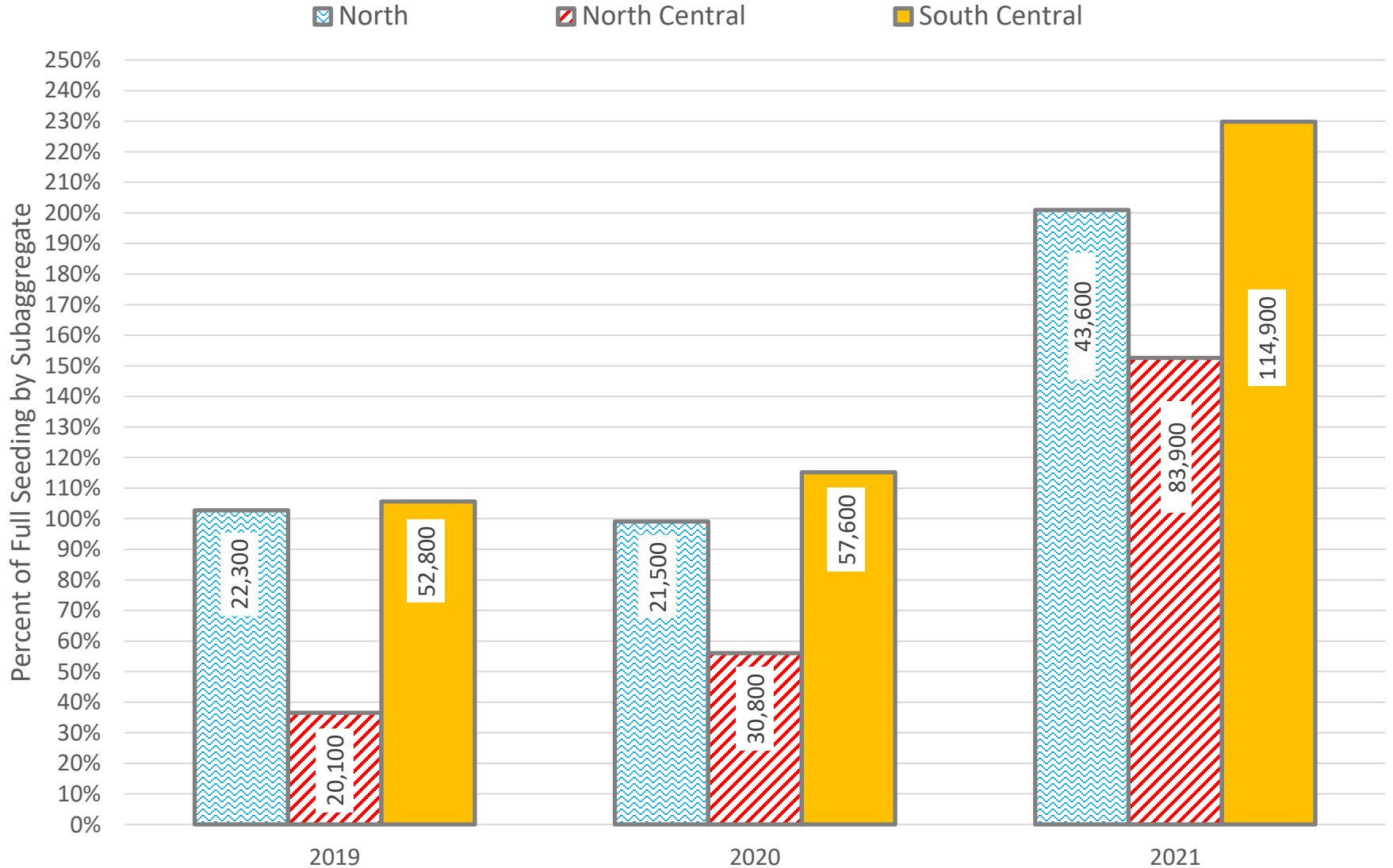
OCN Coho Spawner Escapement Rivers and Lakes, 1990-2021

(boxes show varied recreational coho seasons for Cape Falcon to Humbug Mt.)

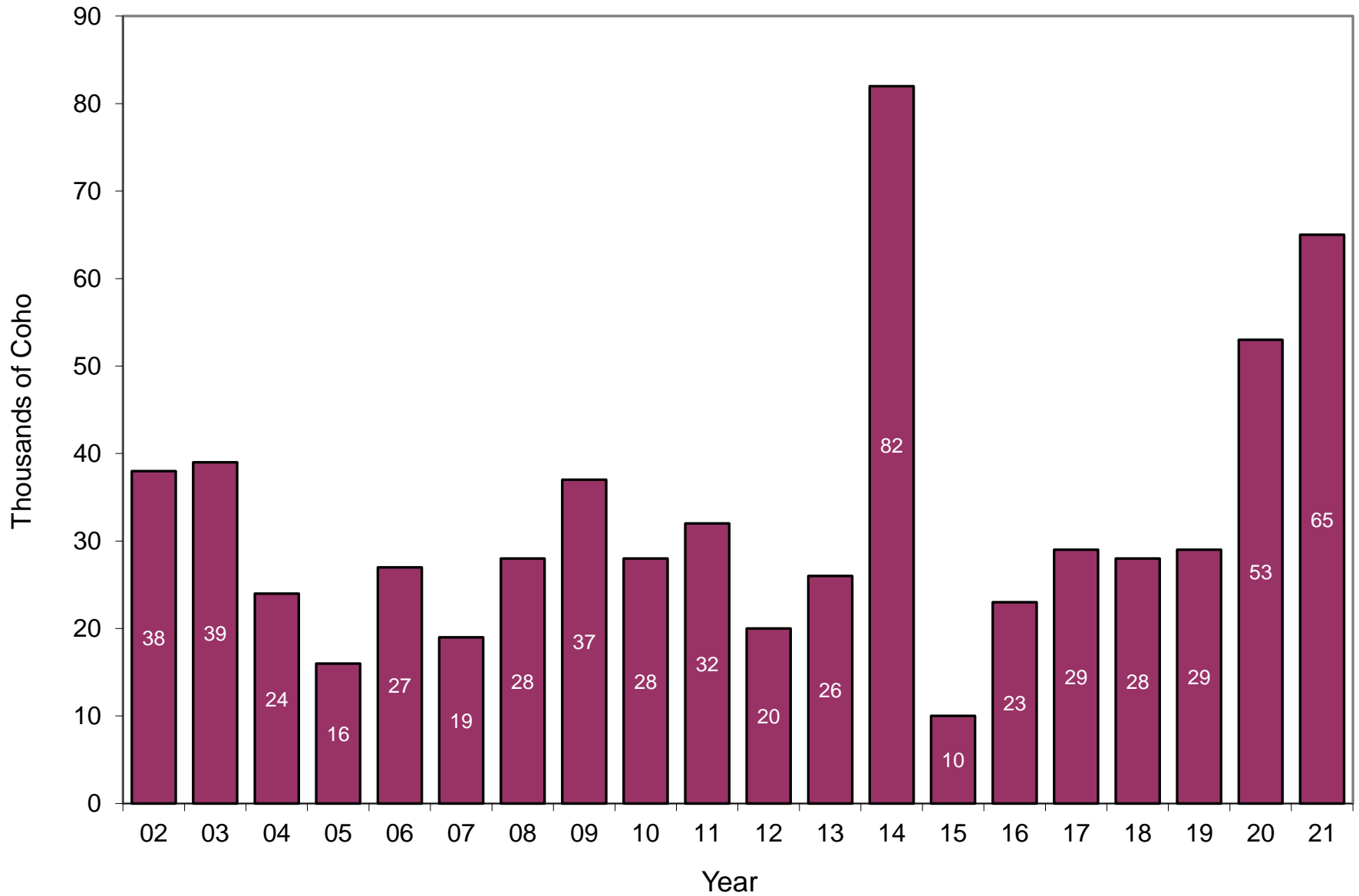


OCN Spawner Escapement by Sub-Aggregate

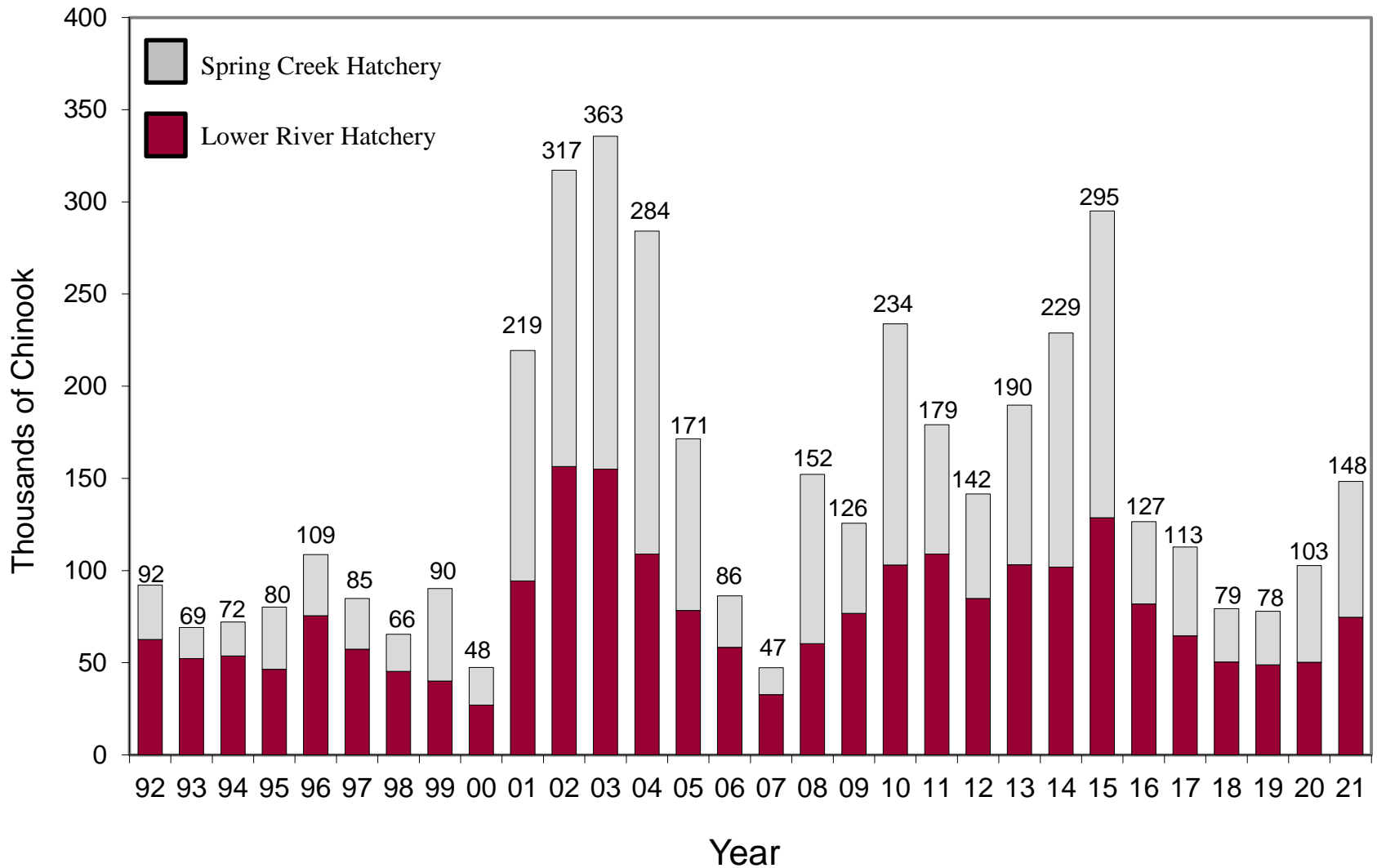
(percent of full-seeding (FS), with spawner numbers included within bars)



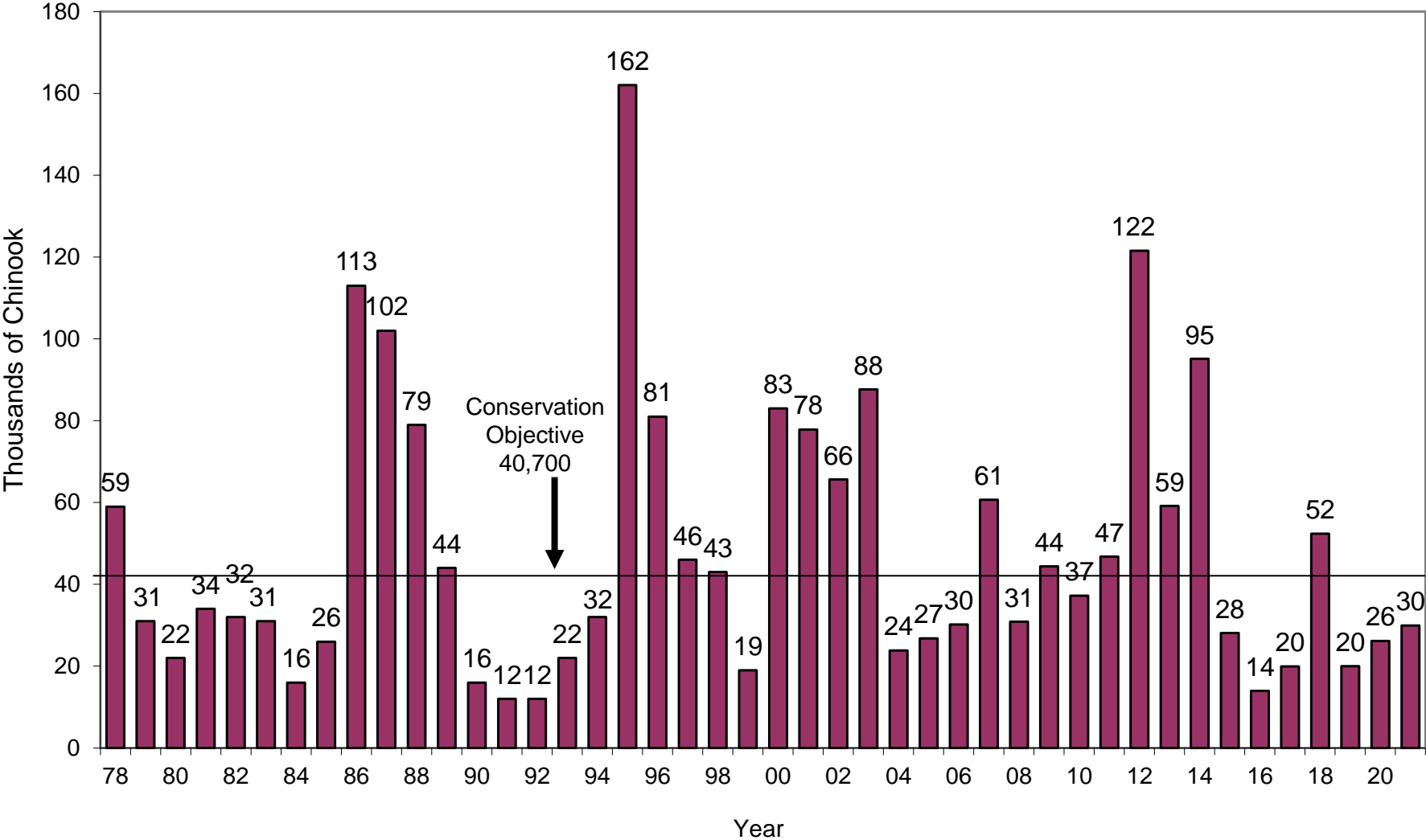
LCN Coho Escapement, 2002-2021



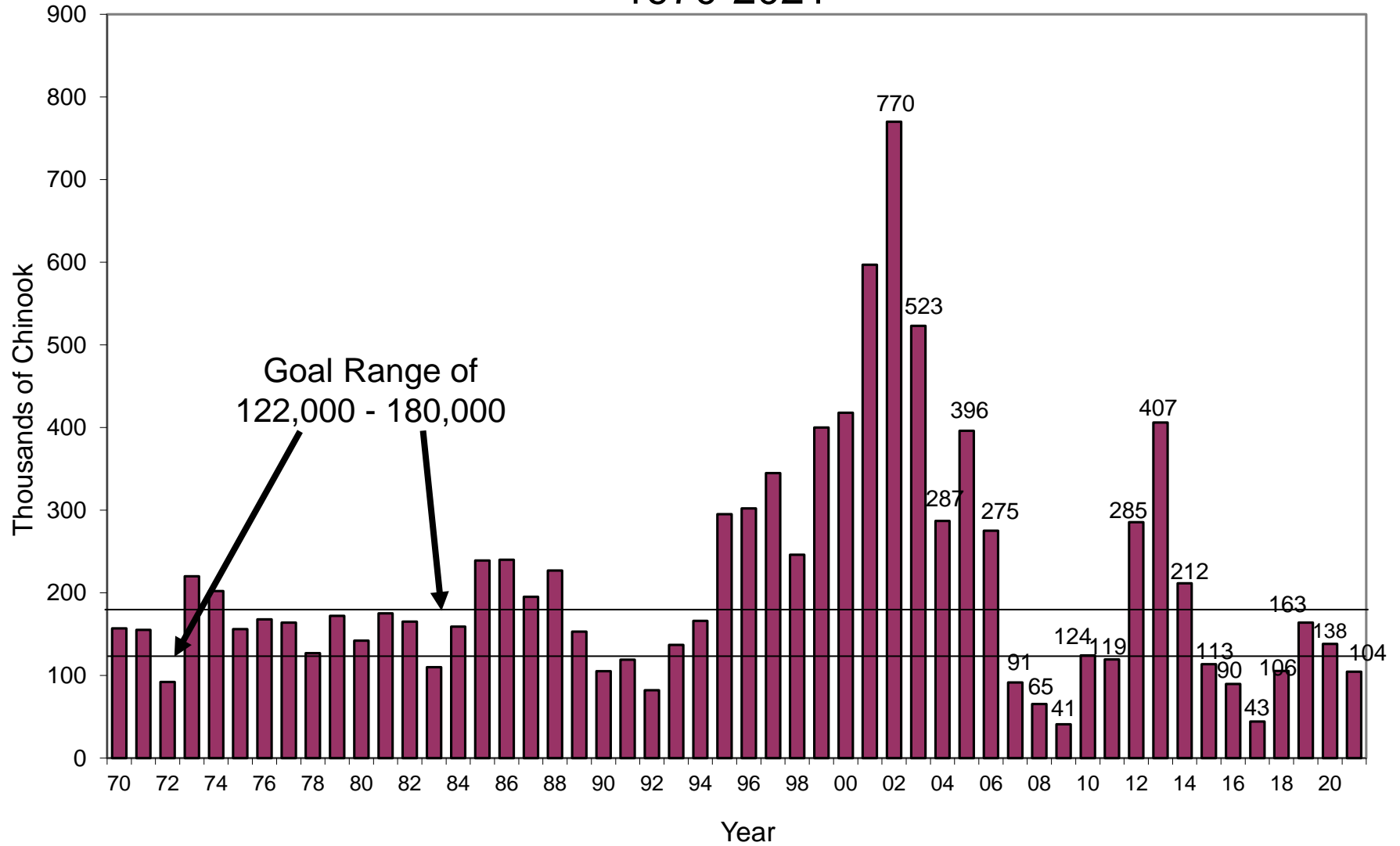
Columbia River Tule Chinook Ocean Escapement, 1992-2021



Klamath River Natural Fall Chinook Adult Spawner Escapement, 1978-2021



Sacramento River Adult Fall Chinook Escapement, 1970-2021



2021 Ocean Abundance Estimates for Select Salmon Stocks Preseason vs. Postseason

Coho	Preseason Expectations	Postseason	Post - Pre
Oregon Production Index (OPI)			
Hatchery	1,607,900	841,300	-766,600
Oregon Coast Natural	125,000	273,300	148,300
Lower Columbia Natural	39,200	70,500	31,300

Chinook

Sacramento Index (Fall Chinook)	271,000	322,100	51,100
Klamath	Age 3 - 135,600	155,300	19,700
	Age 4 - 45,100	38,300	-6,800
Rogue Fall	Index - 274,100	NA	
Oregon Coast North Migrating	Below recent year average		

Columbia River Chinook ^{1/}

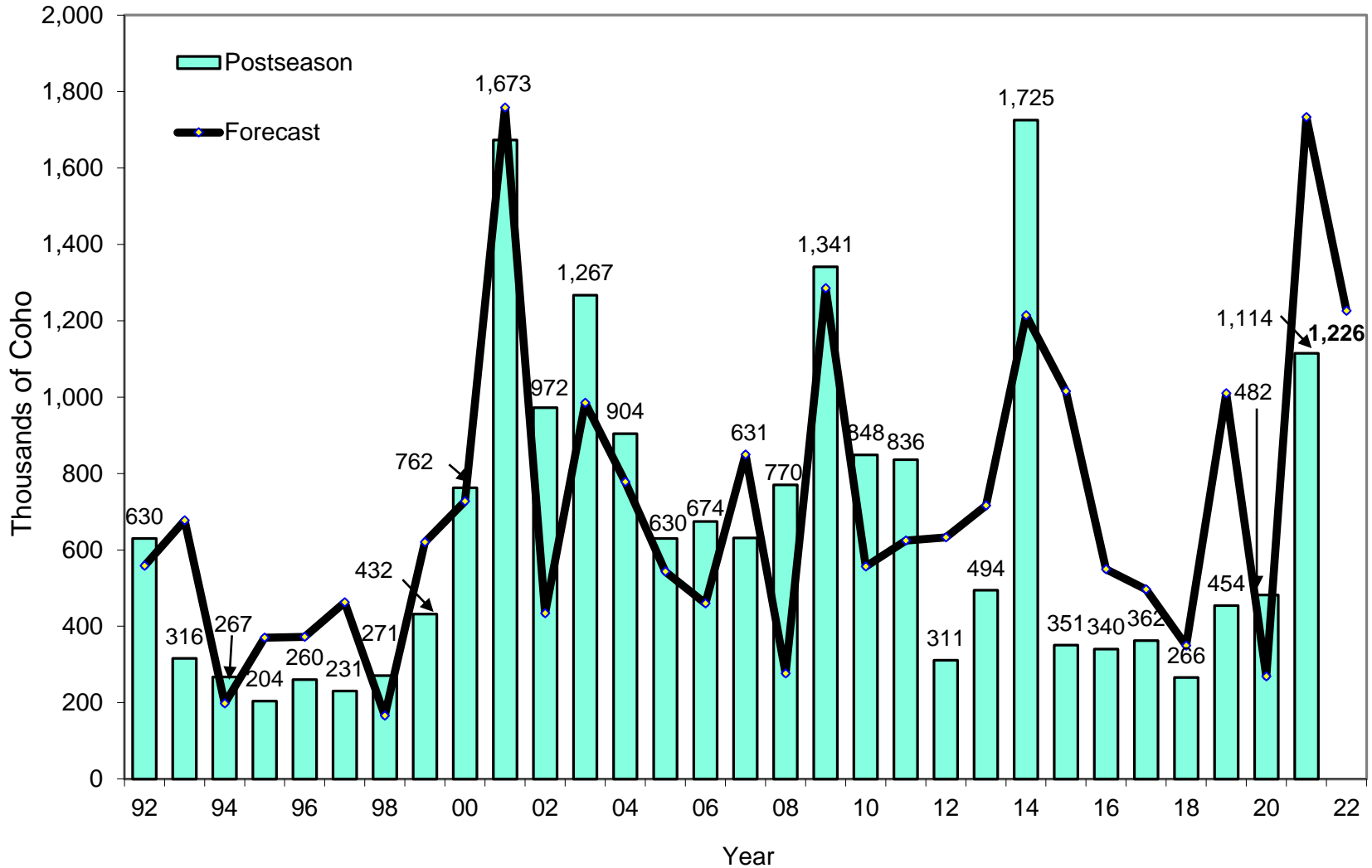
Tules	119,900	148,400	28,500
Fall Brights	460,900	332,800	-128,100
Lower River Wild	20,000	16,900	-3,100
Upriver Spring	75,200	91,800	16,600
Willamette Spring	50,000	41,300	-8,700

^{1/} Preseason expectations to the mouth of the Columbia River.

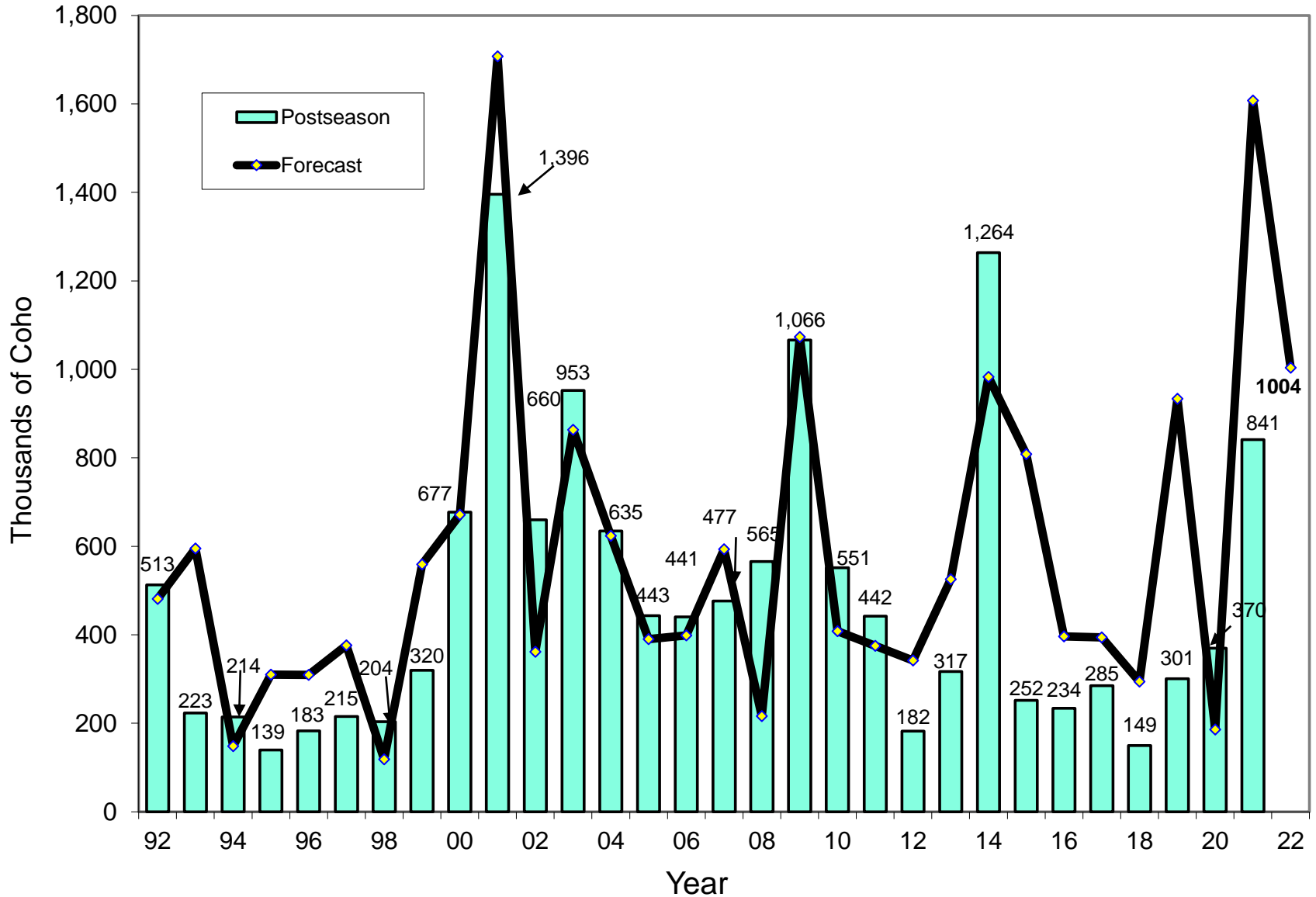
Review of 2022 Salmon Forecasts

- Oregon Production Index (OPI) Coho
 - Columbia River and Coastal Hatchery
 - Oregon Coastal Natural (OCN)
 - Lower Columbia River Natural (LCN)
- Columbia River Chinook
- Klamath River Fall Chinook
- Sacramento Index (Fall Chinook)
- 2022 Forecasts
 - Comparison to Postseason Estimates and Preseason Forecasts

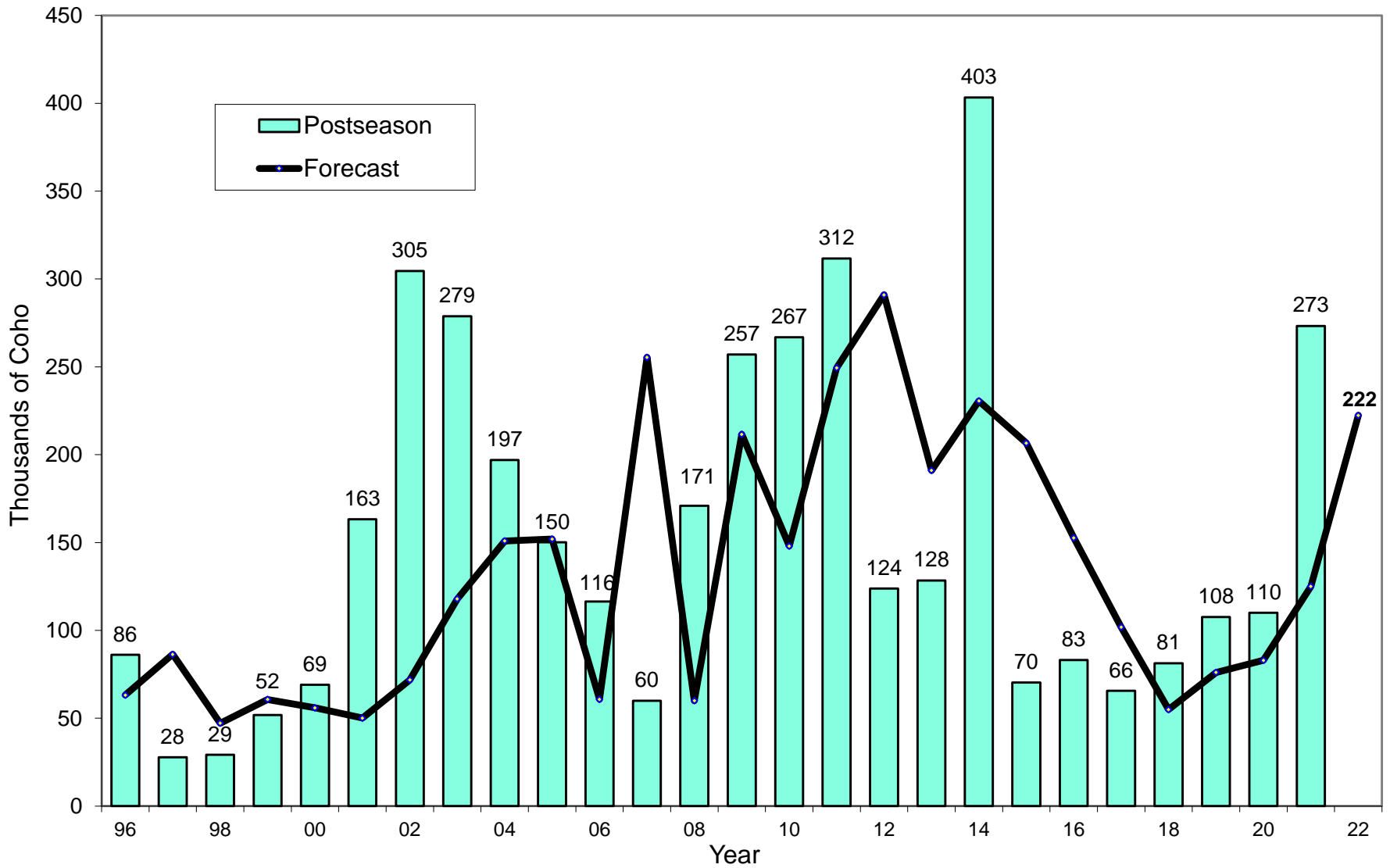
Total OPI Coho Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



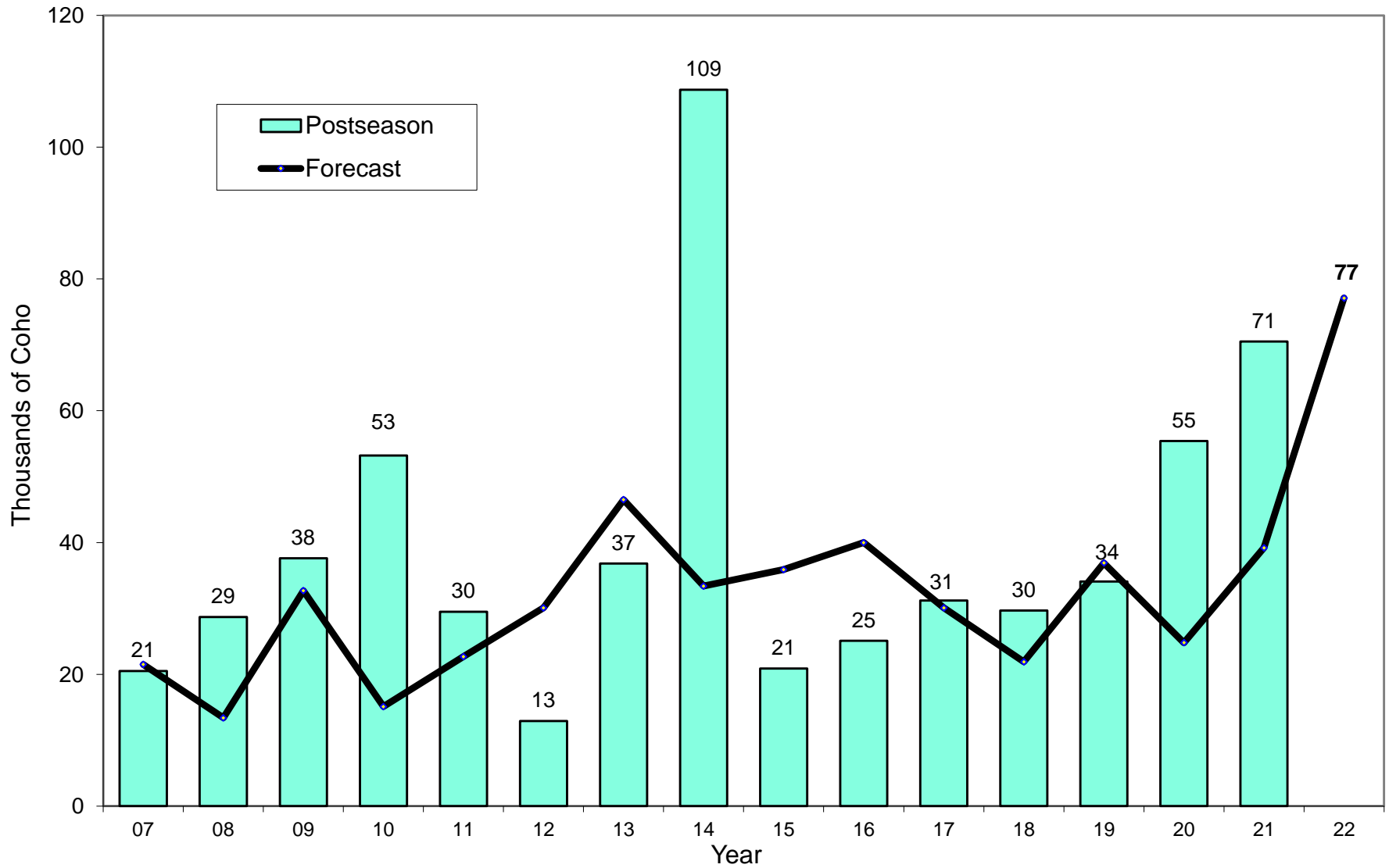
OPI Hatchery Coho Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



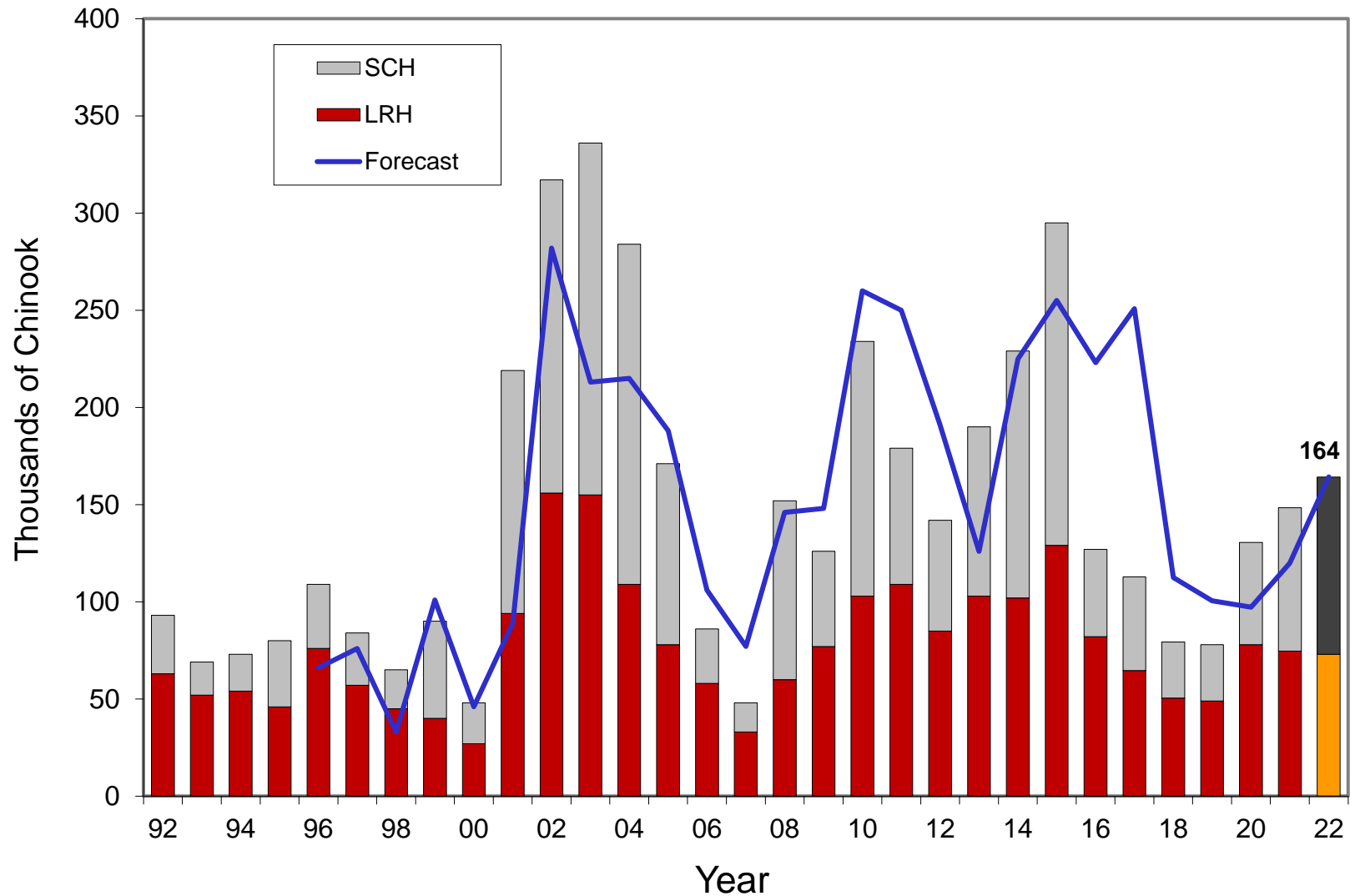
OCN Coho Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



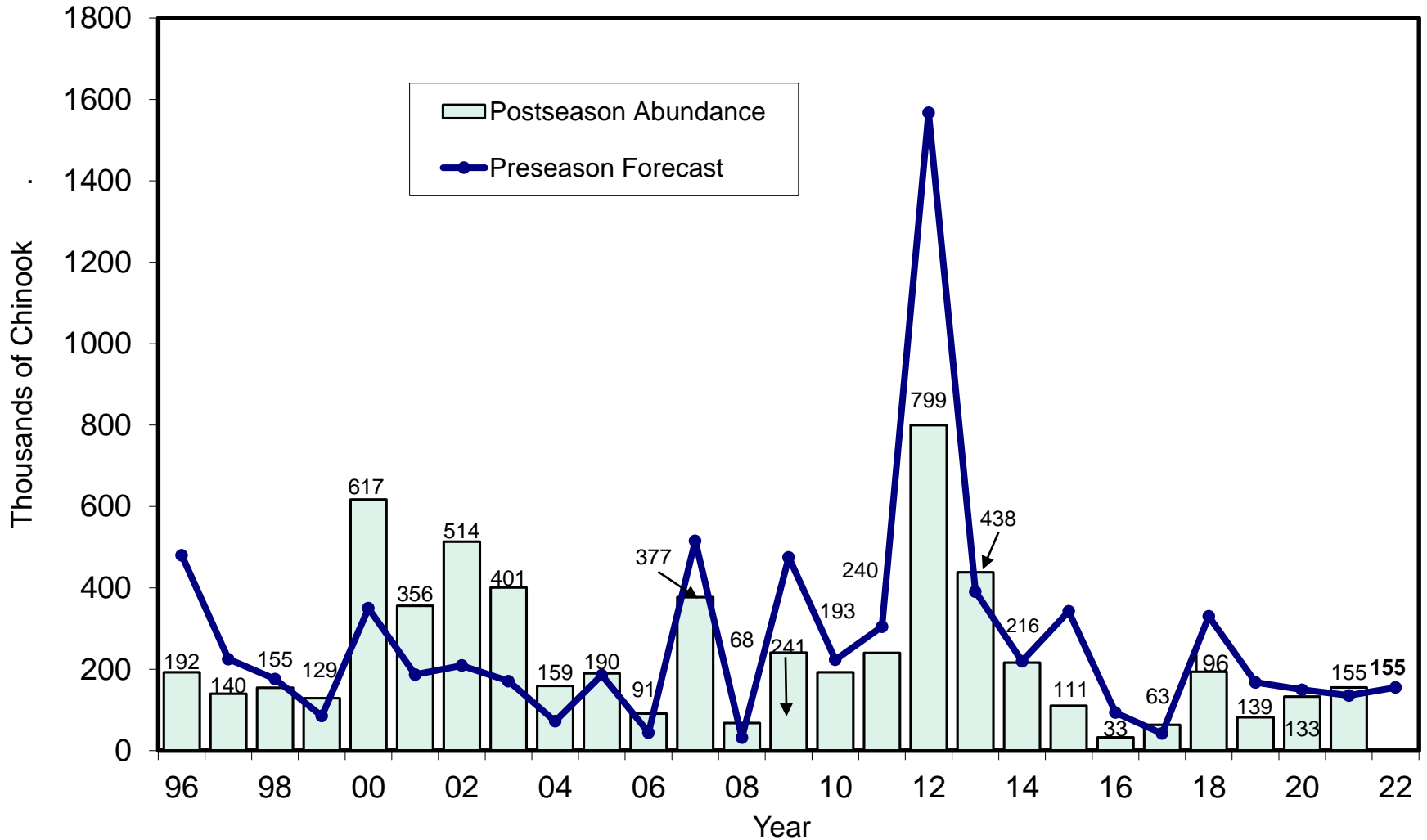
LCN Coho Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



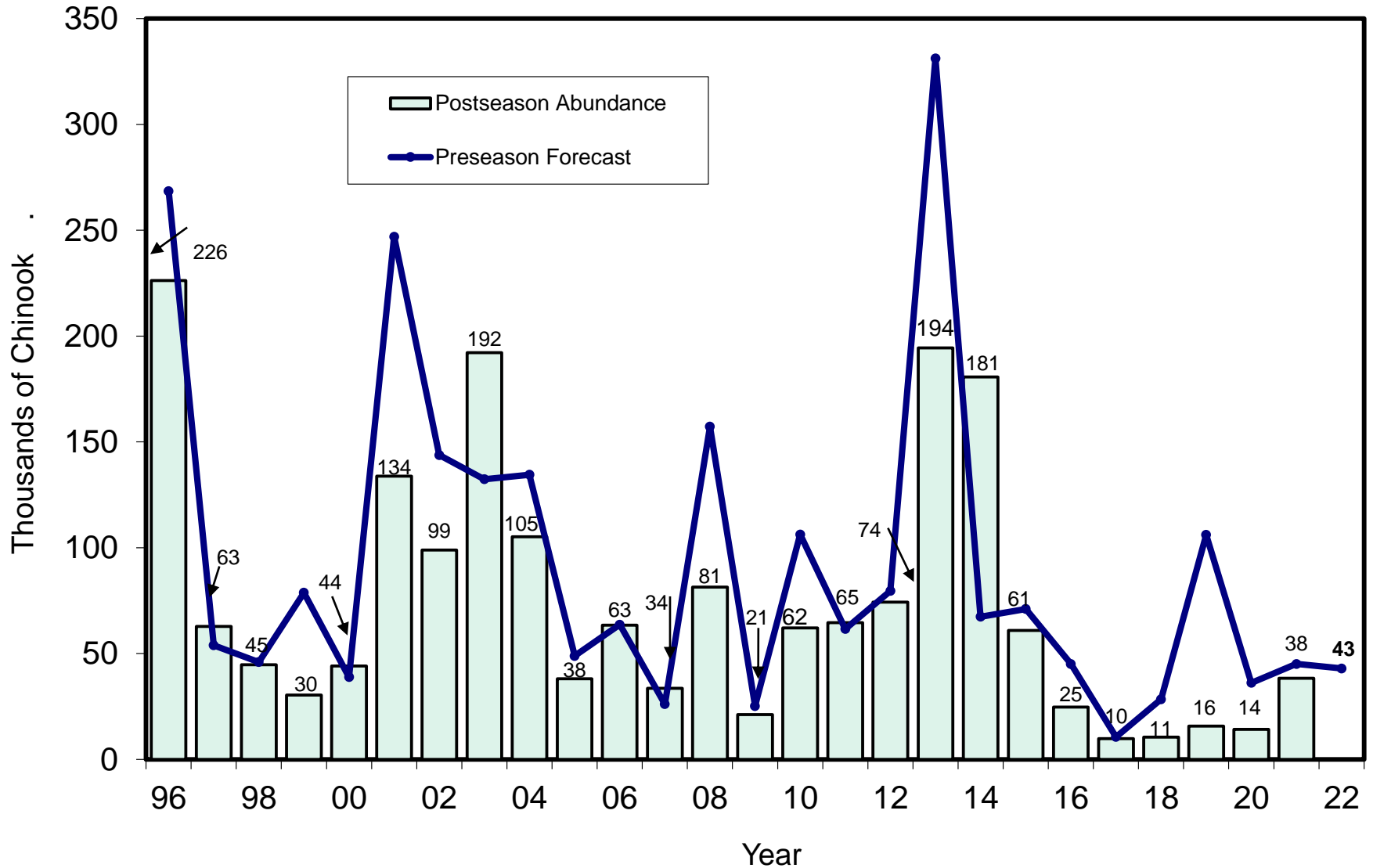
Columbia R. Tule Chinook Ocean Escapement Forecast for 2022 with Postseason Estimate and Preseason Forecast Comparison



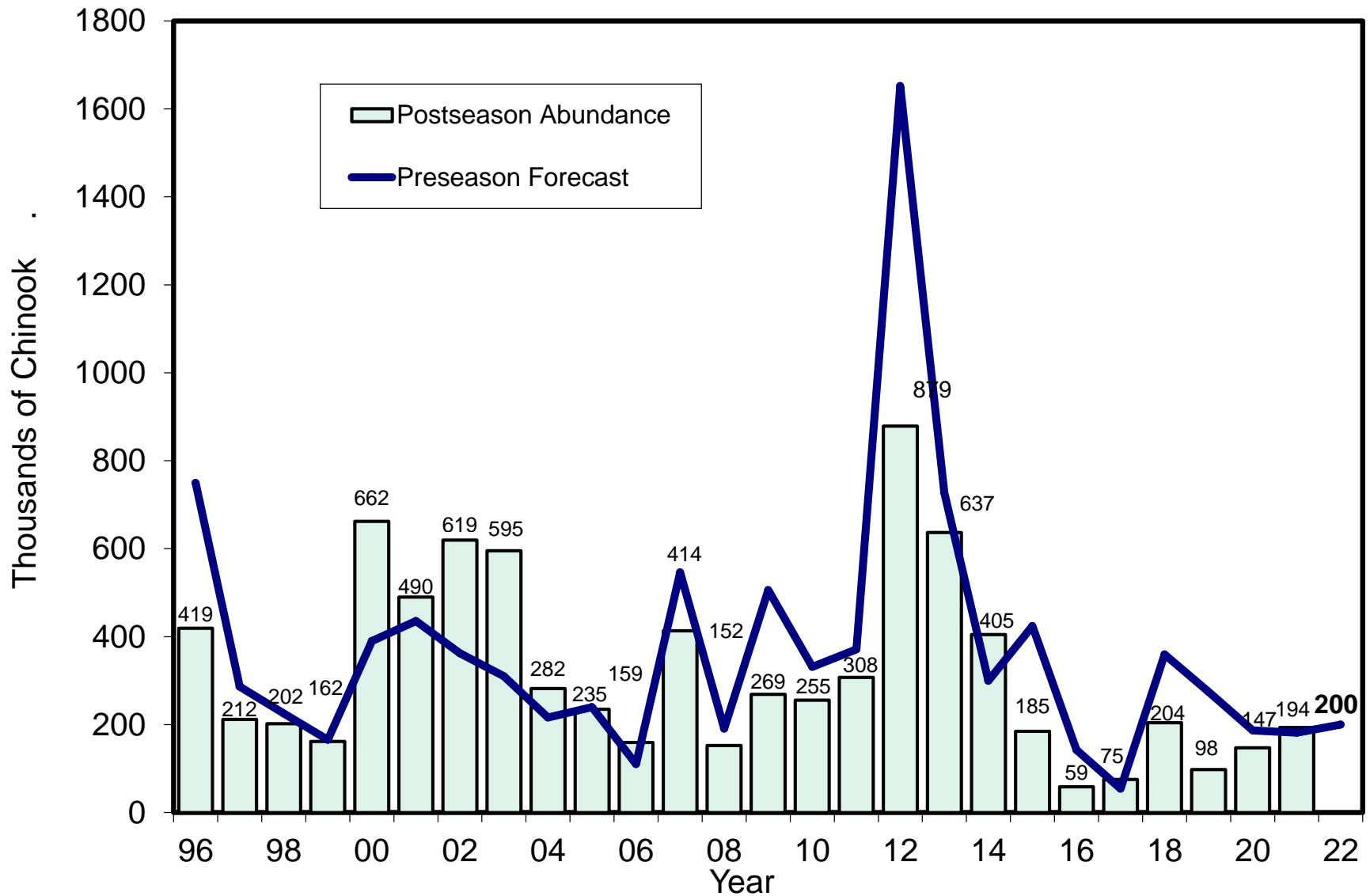
Klamath R. Fall Chinook Age-3 Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



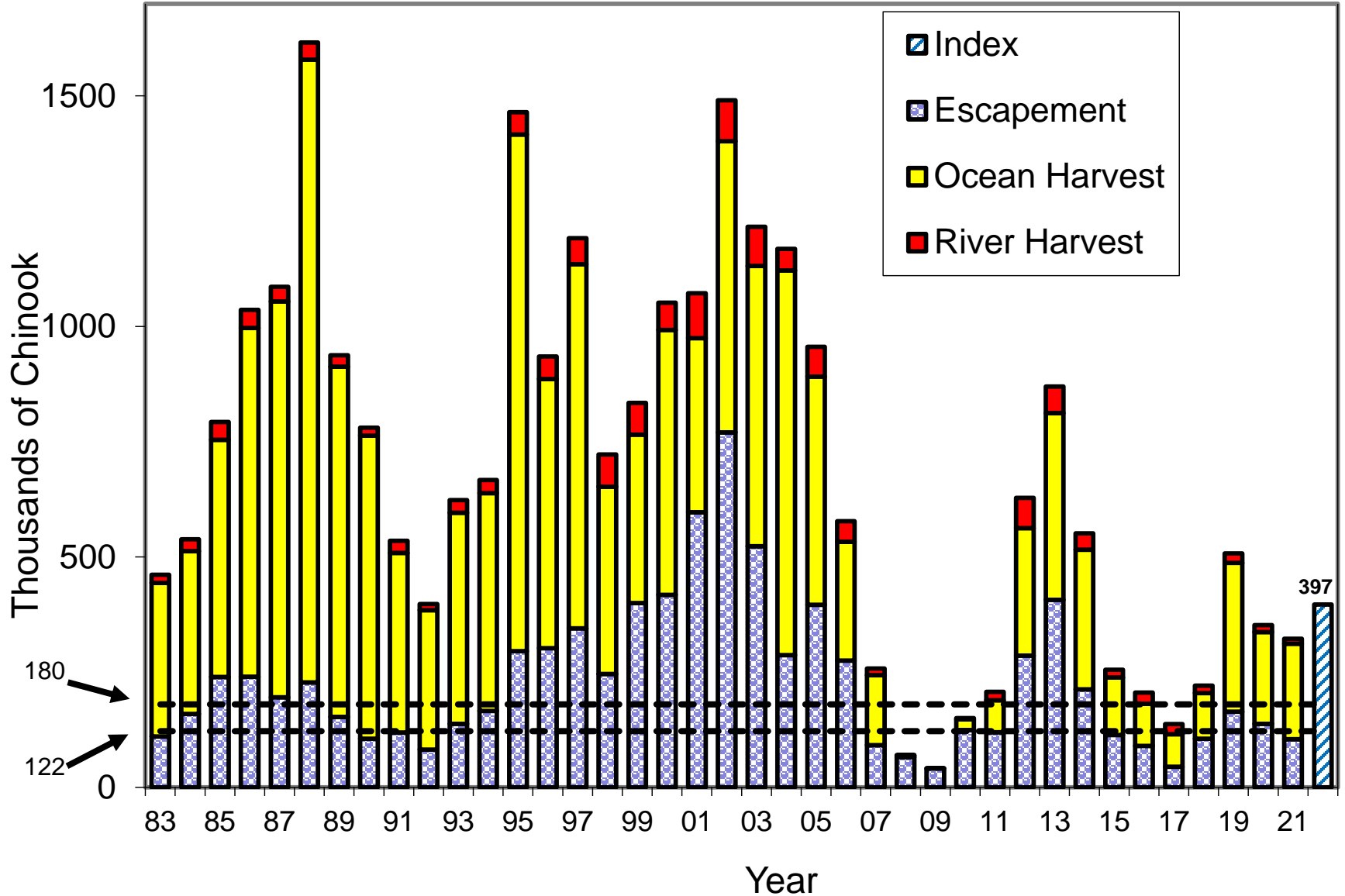
Klamath R. Fall Chinook Age-4 Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



Klamath R. Fall Chinook Adult (all ages) Forecast for 2022 with Preseason Forecast and Postseason Estimate Comparison



Sacramento R. Fall Chinook Escapements and Harvest, 1983-2020; and 2021 Index



Preliminary 2022 Ocean Abundance Forecasts for Select Salmon Stocks

Coho	Preseason Expectations	Comments
Oregon Production Index (OPI)		
Hatchery	1,003,500	604,400 less than 2021 Forecast
Oregon Coast Natural	222,400	97,400 more than 2021 Forecast
Lower Columbia Natural	77,100	37,900 more than 2021 Forecast

Chinook

Sacramento Index (Fall Chinook)	396,500	125,500 more than 2021 Forecast
Klamath	Age 3 - 155,000 Age 4 - 43,200	19,400 more than 2021 Forecast 1,900 less than 2021 Forecast
Rogue Fall	Index - 246,900	27,200 less than 2021 Forecast
Oregon Coast North Migrating	Below recent year average	Decreasing spawner counts

Columbia River Chinook ^{1/}

Tules	164,200	44,300 more than 2021 Forecast
Fall Brights	320,700	140,200 less than 2021 Forecast
Lower River Wild	10,800	9,200 less than 2021 Forecast
Upriver Spring	122,900	47,700 more than 2021 Forecast
Willamette Spring	51,200	1,200 more than 2021 Forecast

^{1/} Preseason expectations to the mouth of the Columbia River.

Component and Basin ^{a/}	2001- 2005 Ave.	2006- 2010 Ave.	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ^{b/}	2021 ^{b/}
NORTHERN													
Necanicum	2,534	2,102	2,120	902	798	5,727	847	936	529	393	698	--	--
Nehalem	20,159	19,364	15,322	2,963	4,539	30,577	3,079	7,549	5,486	4,190	12,383	--	--
Tillamook	6,563	9,408	19,250	1,686	4,402	20,090	1,345	7,102	2,927	2,035	3,961	--	--
Nestucca	7,287	2,063	7,857	1,751	946	6,369	1,029	2,412	4,495	1,072	4,602	--	--
Ind. Tribs.	573	1,132	1,341	218	271	4,607	440	699	206	262	616	--	--
TOTAL	37,116	34,068	45,890	7,520	10,956	67,370	6,740	18,698	13,643	7,952	22,260	21,480	43,620
NORTH CENTRAL													
Salmon	506	672	3,636	297	1,165	3,680	332	1,054	450	103	215	--	517
Siletz	6,902	11,678	33,094	4,495	7,660	19,496	2,216	3,015	5,202	4,064	4,509	--	12,287
Yaquina	10,571	7,618	19,074	6,268	3,553	25,582	2,400	3,730	2,491	4,672	3,452	--	16,119
Beaver Ck.	3,487	1,885	2,389	1,878	2,015	6,564	332	1,709	1,553	494	814	--	2,484
Alsea	8,344	8,353	28,337	8,470	9,283	25,855	6,185	7,375	4,377	5,112	4,915	--	13,060
Siuslaw	24,138	16,700	28,082	11,946	14,118	38,896	10,352	9,141	7,129	6,635	5,881	--	38,031
Ind. Tribs.	3,279	2,017	4,487	492	1,929	1,890	856	464	1,646	958	289	--	1,421
TOTAL	57,227	48,922	119,099	33,846	39,723	121,963	22,673	26,488	22,848	22,038	20,075	30,825	83,919
SOUTH CENTRAL													
Umpqua	37,165	39,149	94,655	20,948	27,016	66,272	14,860	7,494	15,492	24,035	19,158	33,644	47,130
Coos	26,572	16,423	10,999	9,414	6,884	38,880	3,030	4,624	2,689	7,292	13,289	--	--
Coquille	15,571	19,437	55,667	5,911	23,637	41,660	3,357	9,494	4,641	5,688	11,841	--	--
Floras Ck.	3,568	3,352	9,217	2,502	1,936	1,022	1,585	942	693	628	904	--	--
Sixes R.	157	140	334	34	567	410	168	120	69	174	155	--	--
Coastal Lakes	18,205	22,557	20,281	18,922	13,659	22,010	4,729	8,044	1,302	6,704	7,433	9,722	19,626
Ind. Tribs.	-	224	101	48	33	106	0	0	0	10	23	0	0
TOTAL	101,238	101,282	191,254	57,779	73,732	170,360	27,729	30,718	24,886	44,531	52,803	57,627	114,897
SOUTH													
Rogue ^{c/}	12,349	3,140	5,033	5,792	12,354	2,664	4,487	7,568	4,773	9,238	2,686	1,824	8,991
COASTWIDE	207,930	187,323	361,276	104,937	136,765	362,357	61,629	83,472	66,150	83,759	97,824	111,756	251,427

a/ The sum of the individual basins may not equal the aggregate totals due to the use of independent estimates at different geographic scales.

b/ (--) Estimates were not made due to low survey rates and sampling levels.

c/ Mark recapture estimate based on seining at Huntley Park in the lower Rogue River.