

# **Review of 2020 Salmon Spawner Escapements and 2021 Coho and Chinook Abundance Forecasts**

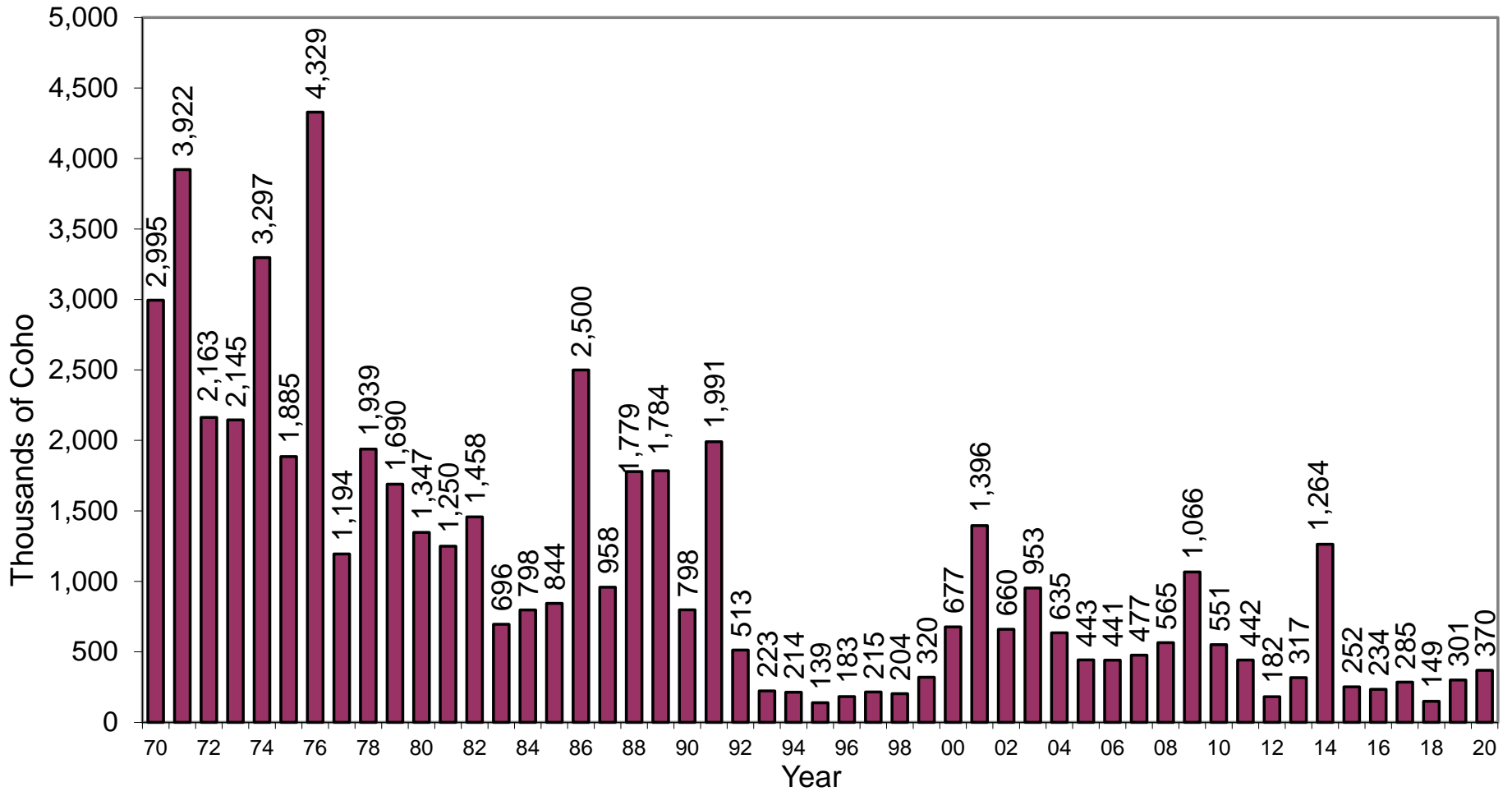
## 2021 Ocean Fishery Process Schedule

February 25	Ocean Salmon Industry Group Meeting * 2021 Forecasts * 2021 Salmon season discussions	Locations/Times TBD; teleconference or virtual anticipated
February 25	CDFW Public Meeting * 2021 Forecasts * 2021 Salmon season discussions	
February 26	WDFW Public Meeting * 2021 Forecasts * 2021 Salmon season discussions	
March 2-5, 8-11	Pacific Fishery Management Council * Adopt 2021 ocean salmon alternatives for public review	
March 17	North of Falcon I (Public Meeting) * Ocean/Puget S./Col. R. area salmon season negotiations	
March 19	Oregon Fish and Wildlife Commission * Ocean Salmon (informational)	
March 23	PFMC Public Options Hearing - Washington * Public input on 2021 season alternatives	
March 23	PFMC Public Options Hearing - California * Public input on 2021 season alternatives	
March 24	PFMC Public Options Hearing - Oregon * Public input on 2021 season alternatives	
March 31	North of Falcon (Public Meeting) * Ocean and Columbia River	
April 6-9, 12-15	Pacific Fishery Management Council * Adopt 2021 ocean salmon fishery regulations	
April 23	Oregon Fish and Wildlife Commission * Adopt state waters ocean salmon fishery regulations	

# **Review of 2020 Salmon Spawning Escapements and Abundance**

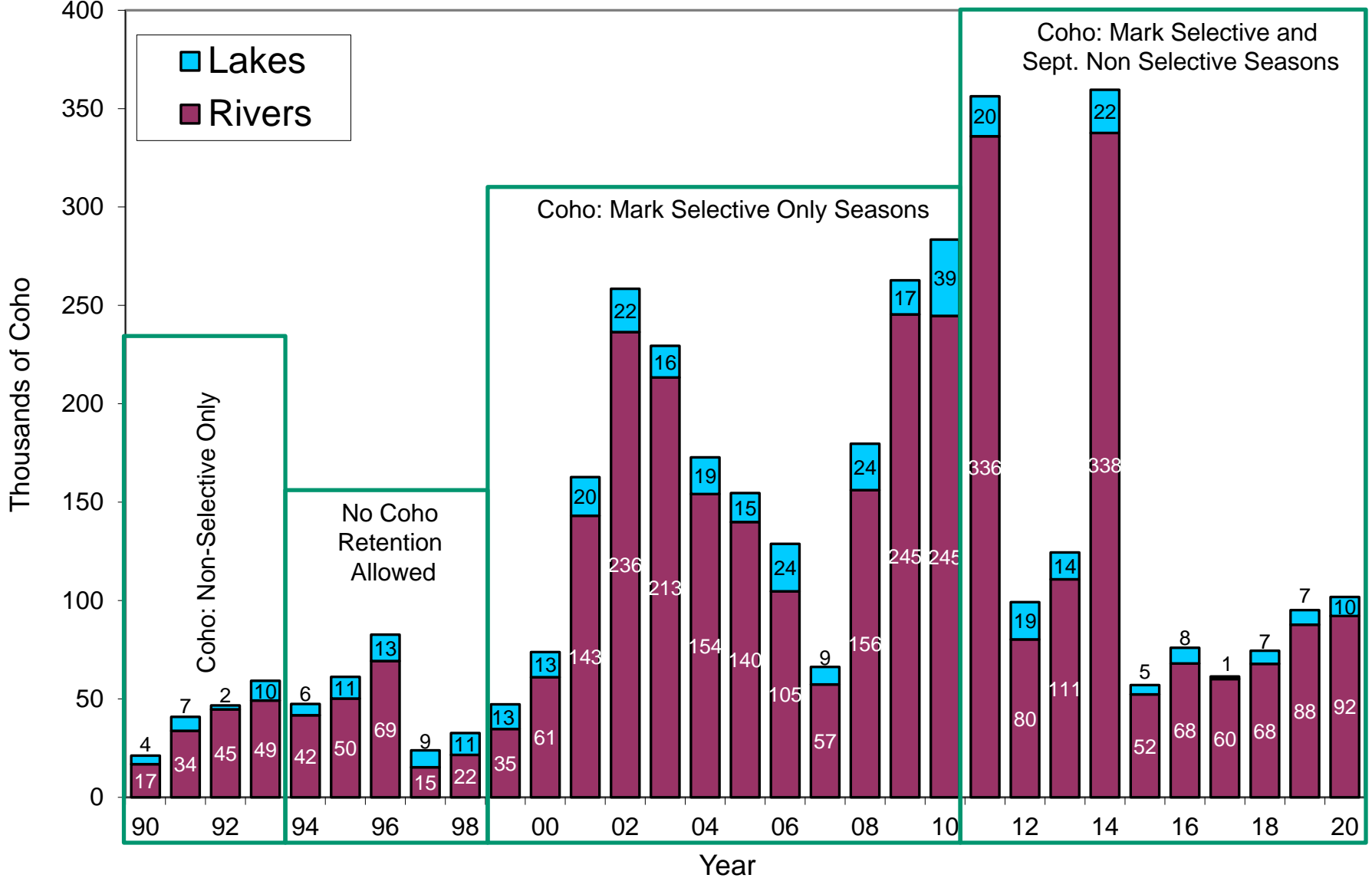
- Oregon Production Index (OPI) Coho
- Oregon Coastal Natural (OCN)
- Lower Columbia River Natural (LCN)
- Columbia River Chinook
- Klamath River Fall Chinook
- Sacramento River Fall Chinook

# Oregon Production Index Area Hatchery Coho Abundance Estimates, 1970-2020



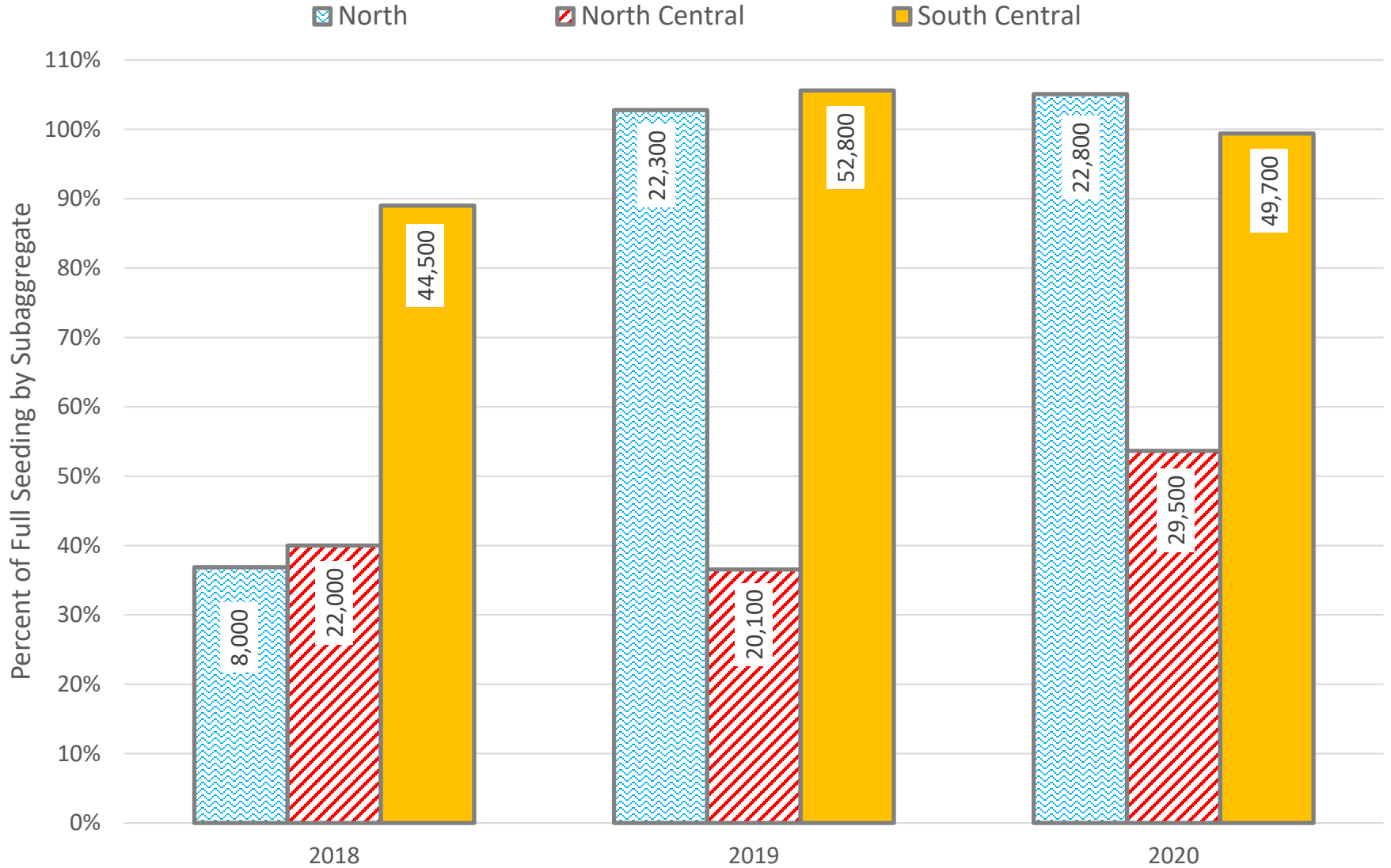
# OCN Coho Spawner Escapement Rivers and Lakes, 1990-2020

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

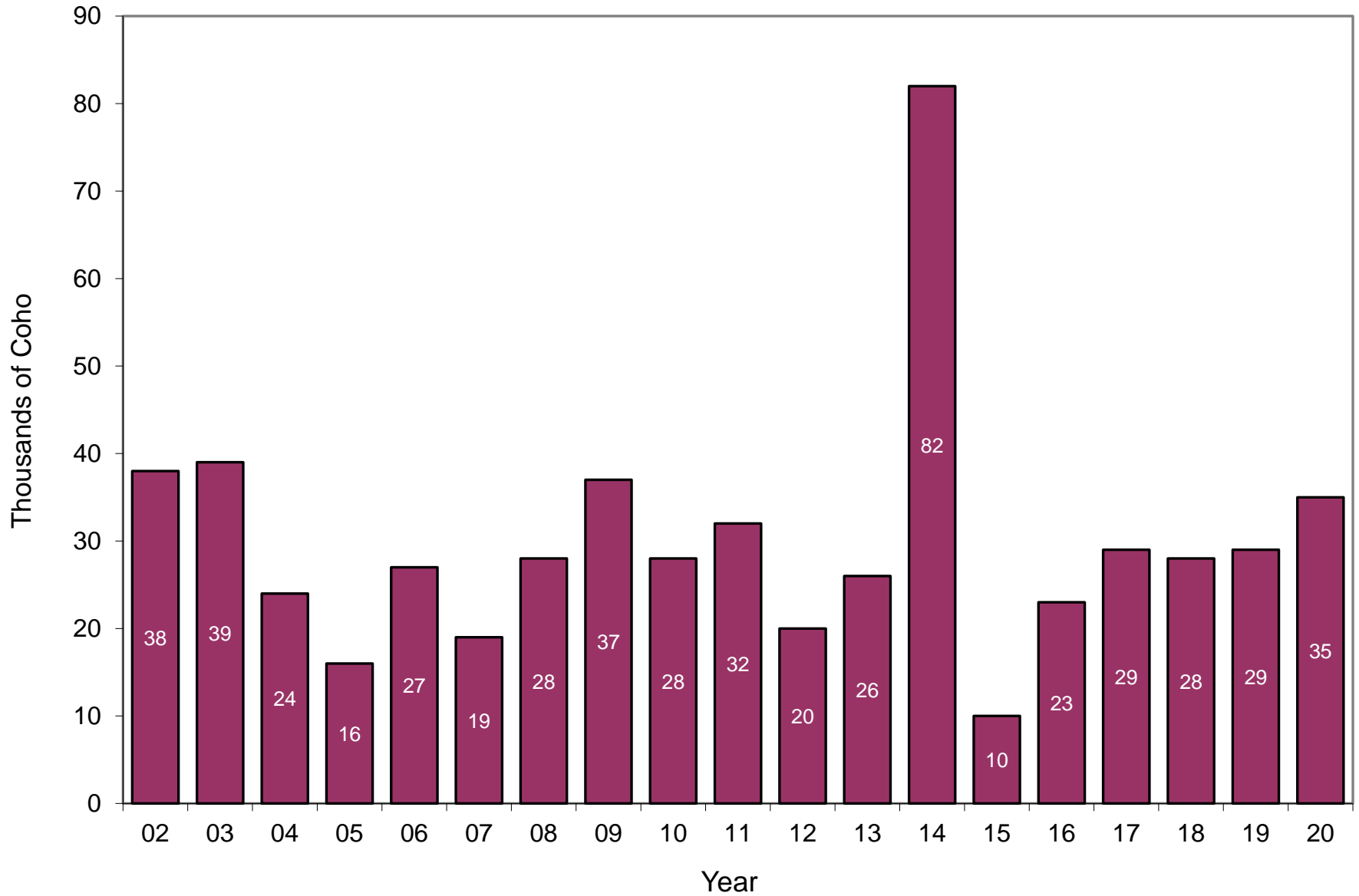


# OCN Spawner Escapement by Sub-Aggregate

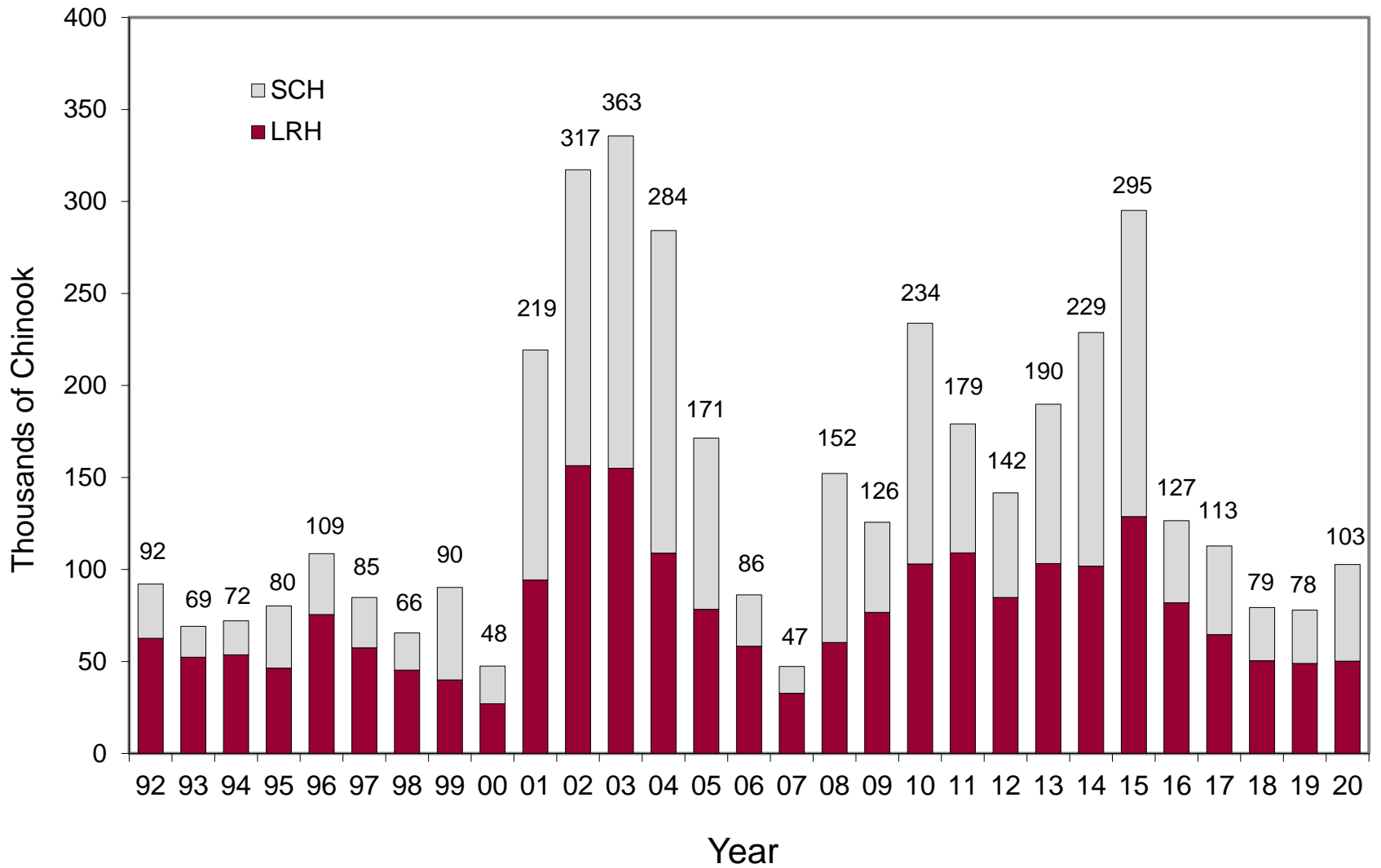
(percent of full-seeding (FS), with spawner numbers included within bars)



# LCN Coho Escapement, 2002-2020

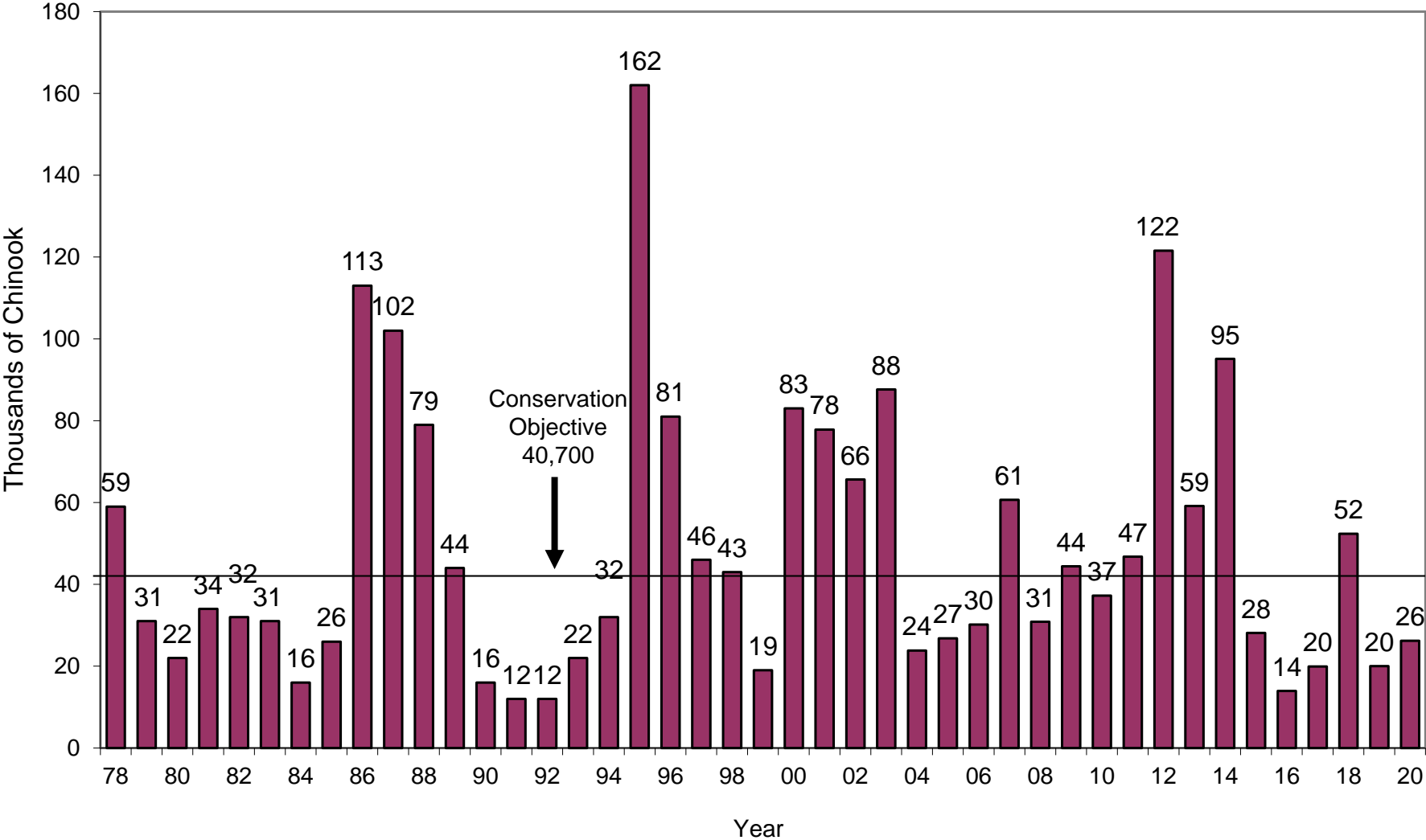


# Columbia River Tule Chinook Ocean Escapement, 1992-2020

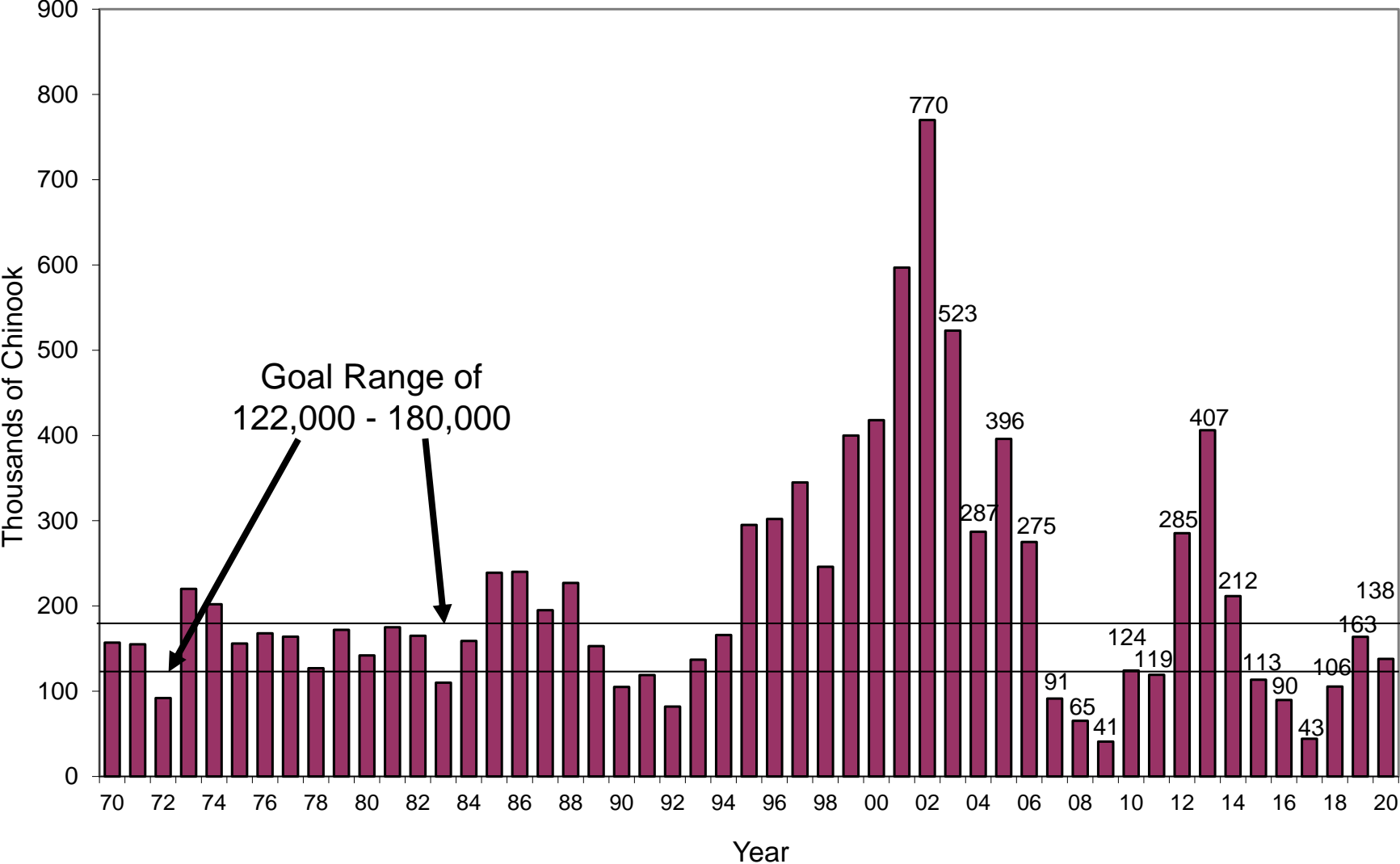




# Klamath River Natural Fall Chinook Adult Spawner Escapement, 1978-2020



# Sacramento River Adult Fall Chinook Escapement, 1970-2020



## 2020 Ocean Abundance Estimates for Select Salmon Stocks Preseason vs. Postseason

Coho	Preseason Expectations	Postseason	Post - Pre
<b>Oregon Production Index (OPI)</b>			
Hatchery	185,700	369,600	183,900
Oregon Coast Natural	83,000	110,000	27,000
Lower Columbia Natural	24,800	37,100	12,300

### Chinook

Sacramento Index (Fall Chinook)	473,200	351,900	-121,300
Klamath	age 3 - 149,600 age 4 - 32,600	158,700 15,000	9,100 -17,600
Rogue Fall	Index -256,900	NA	
Oregon Coast North Migrating	Fair Returns	Improved survey results and returns.	

### Columbia River Chinook <sup>1/</sup>

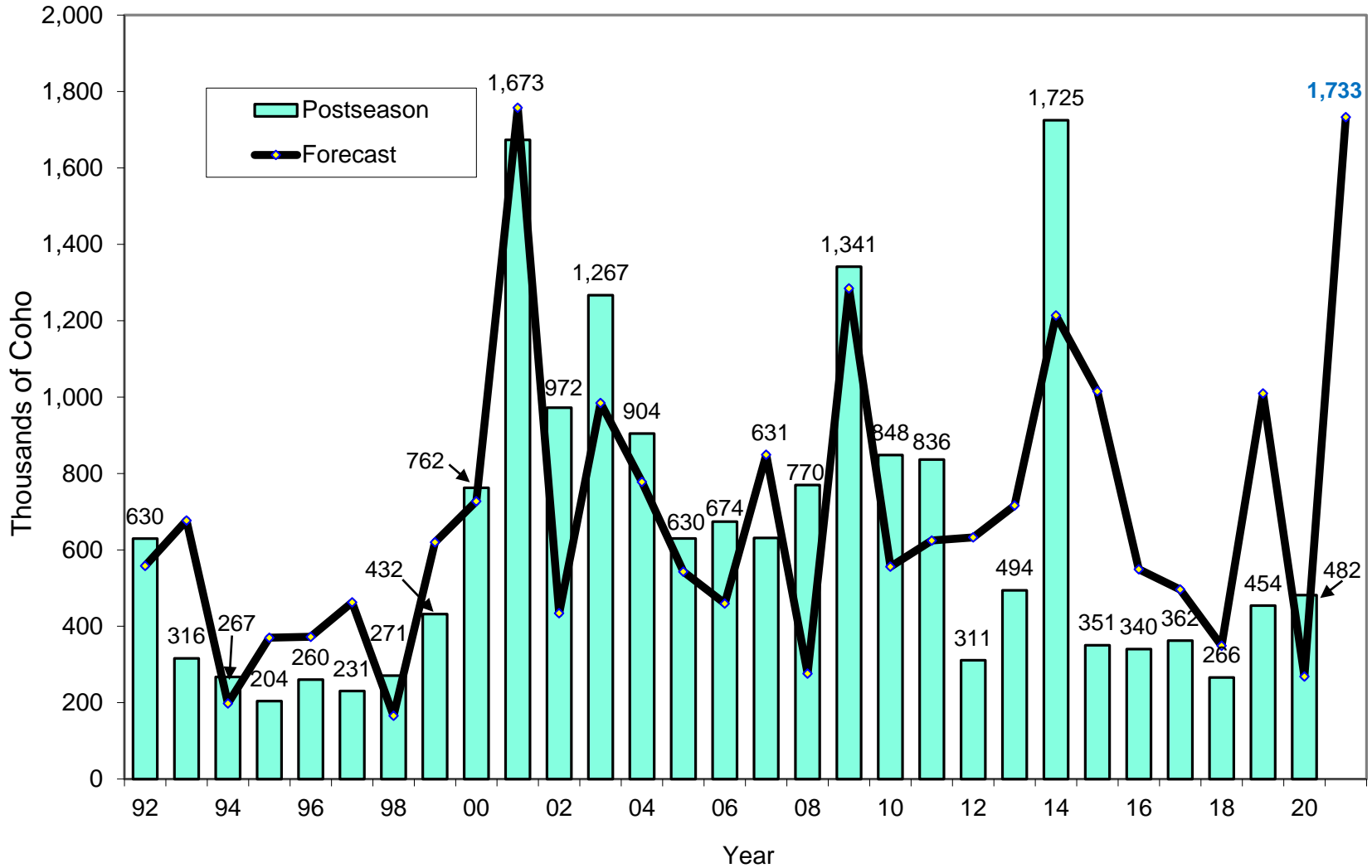
Tules	97,200	130,600	33,400
Fall Brights	333,800	444,100	110,300
Lower River Wild	19,700	35,400	15,700
Upriver Spring	81,700	81,300	-400
Willamette Spring	43,400	47,300	3,900

<sup>1/</sup> Preseason expectations to the mouth of the Columbia River.

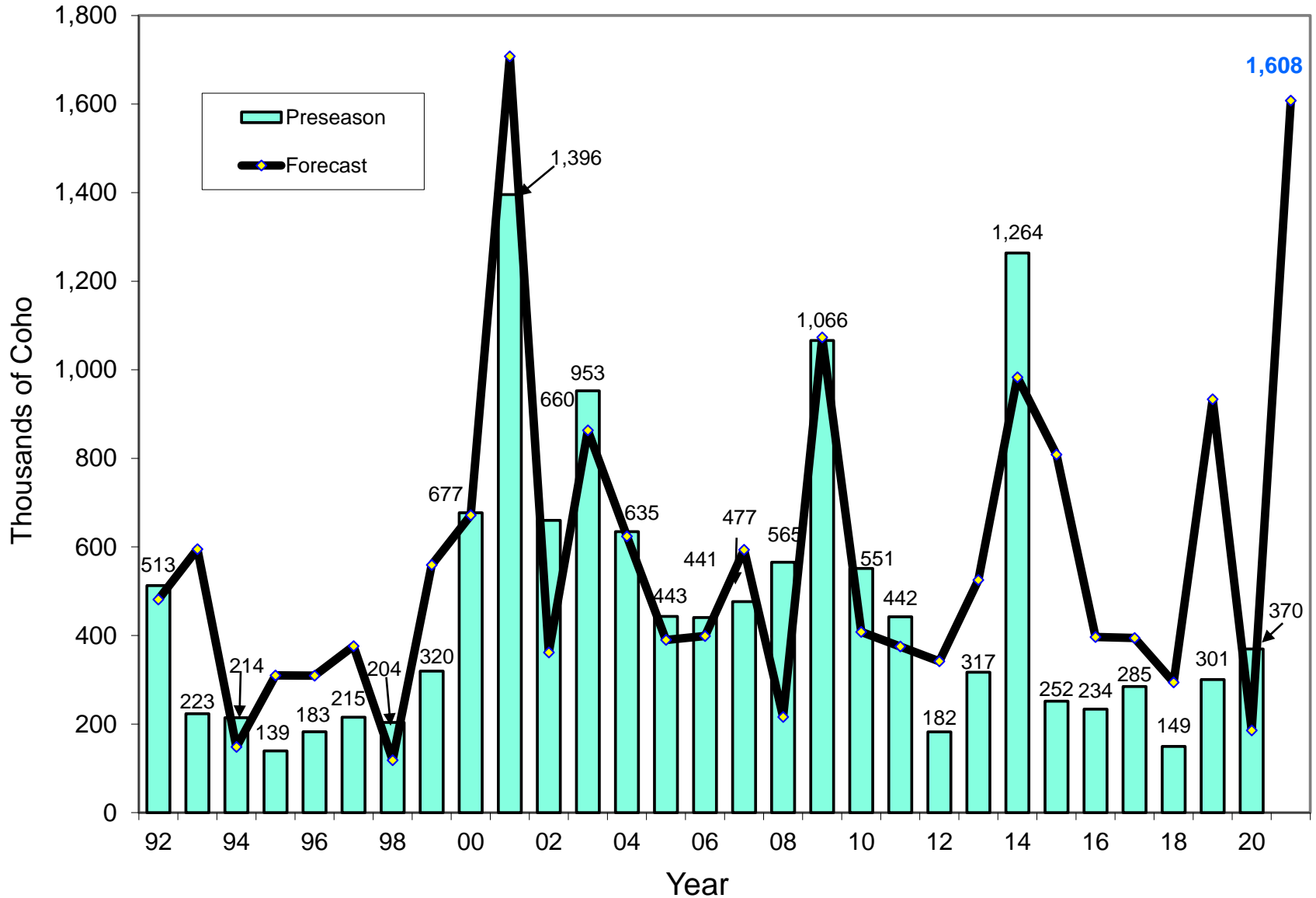
# Review of 2020 Salmon Forecasts

- 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)
- 2021 Forecasts
  - Comparison to Postseason Estimates and Preseason Forecasts

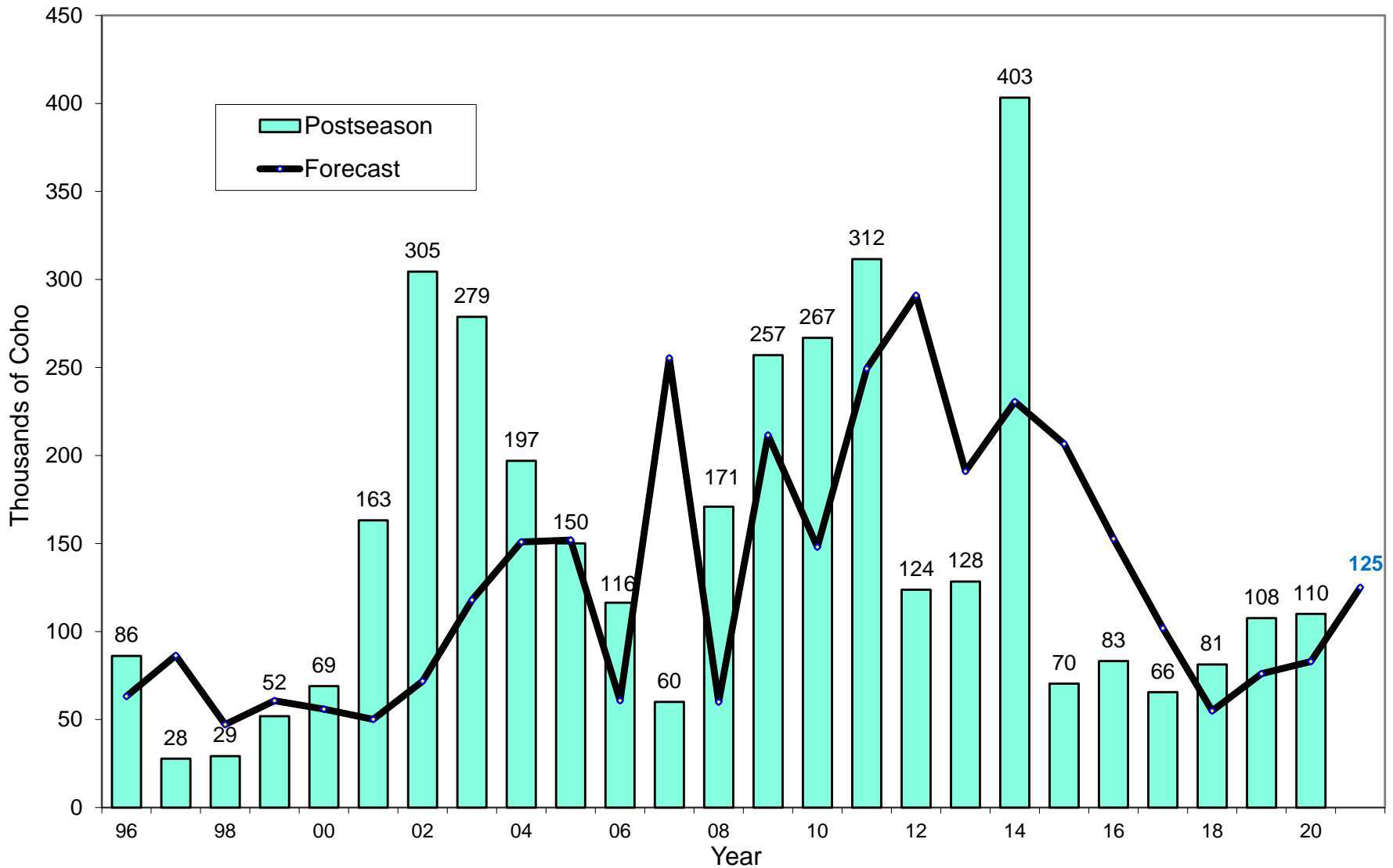
# Total OPI Coho Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison



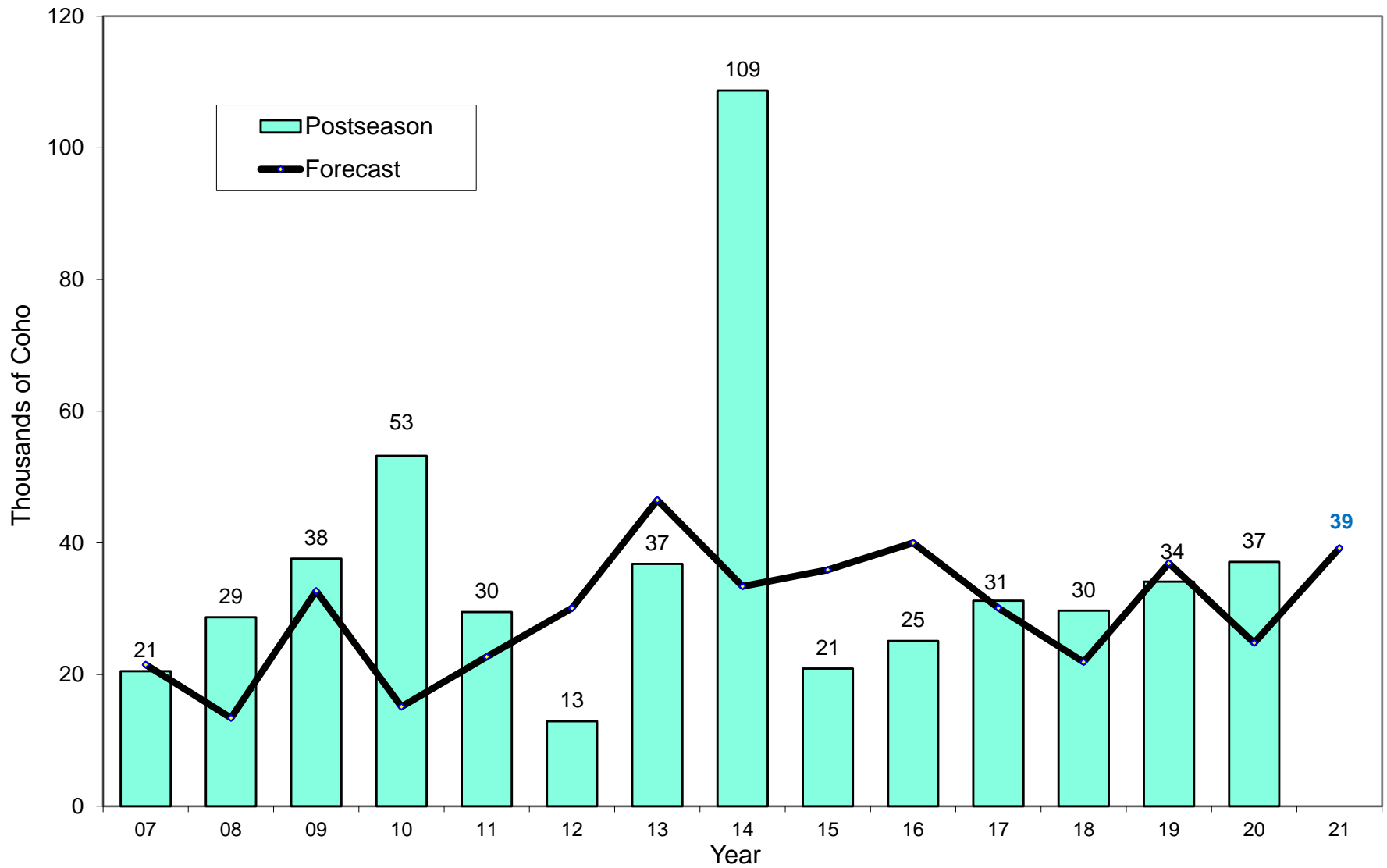
# OPI Hatchery Coho Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison



# OCN Coho Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison

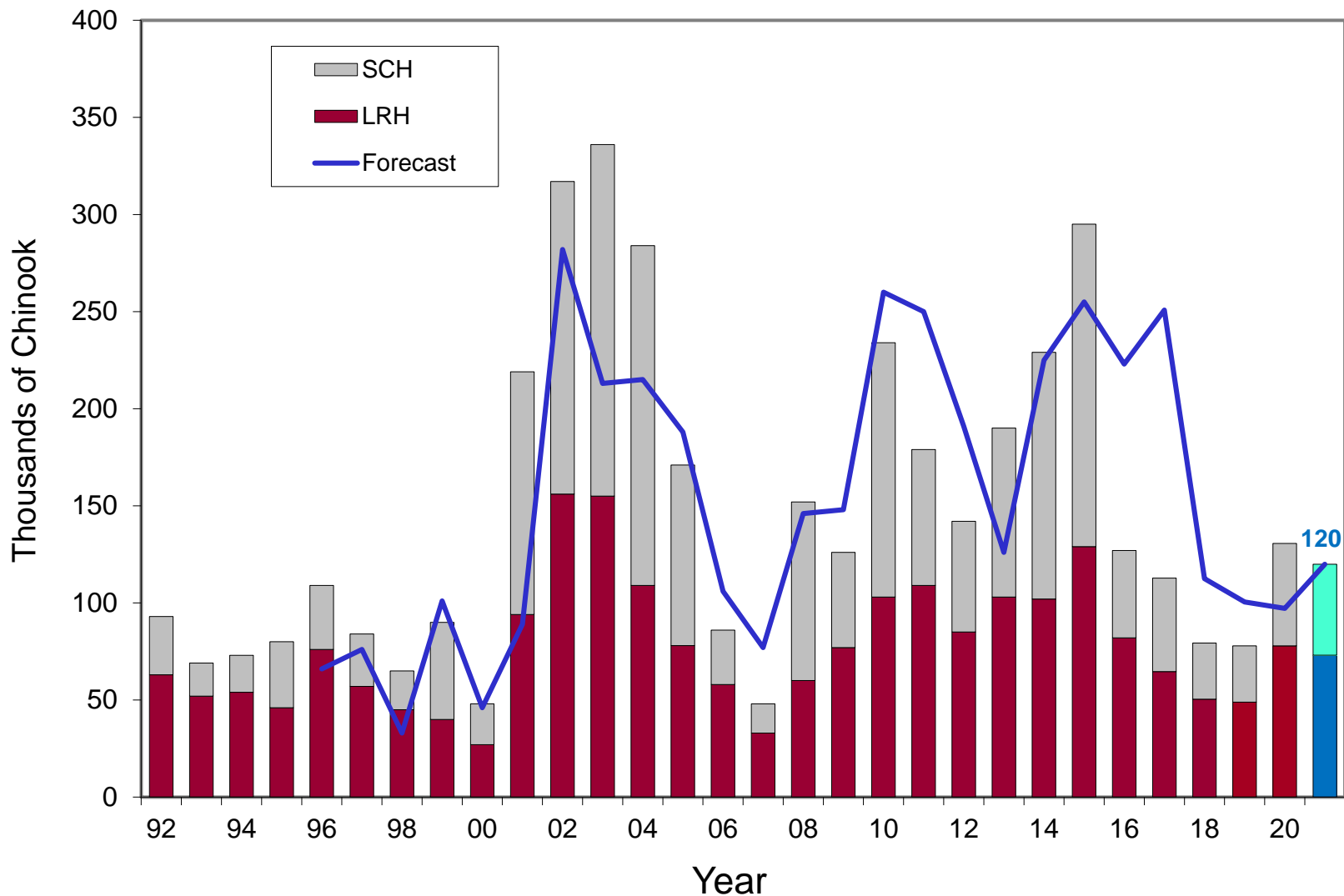


# LCN Coho Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison

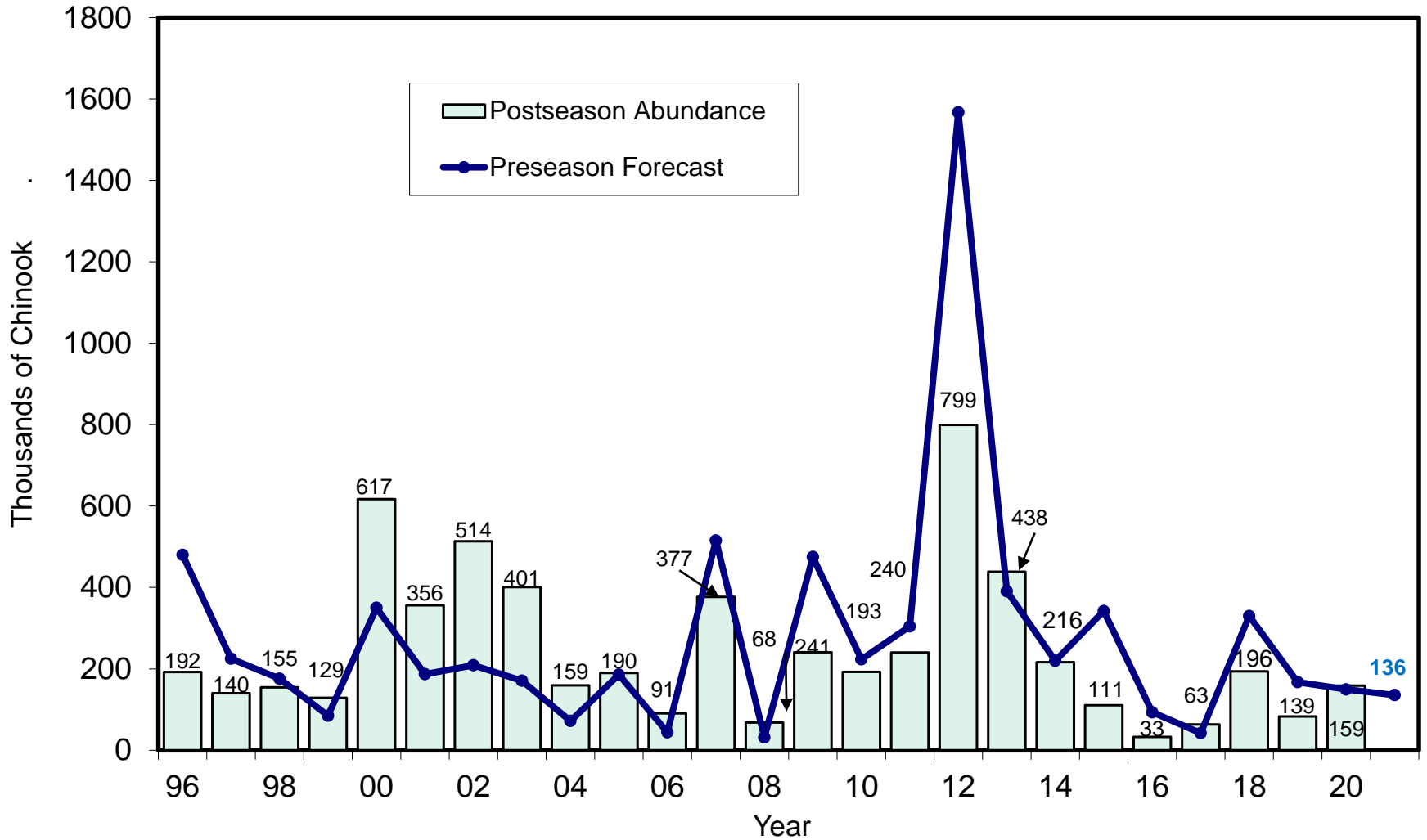




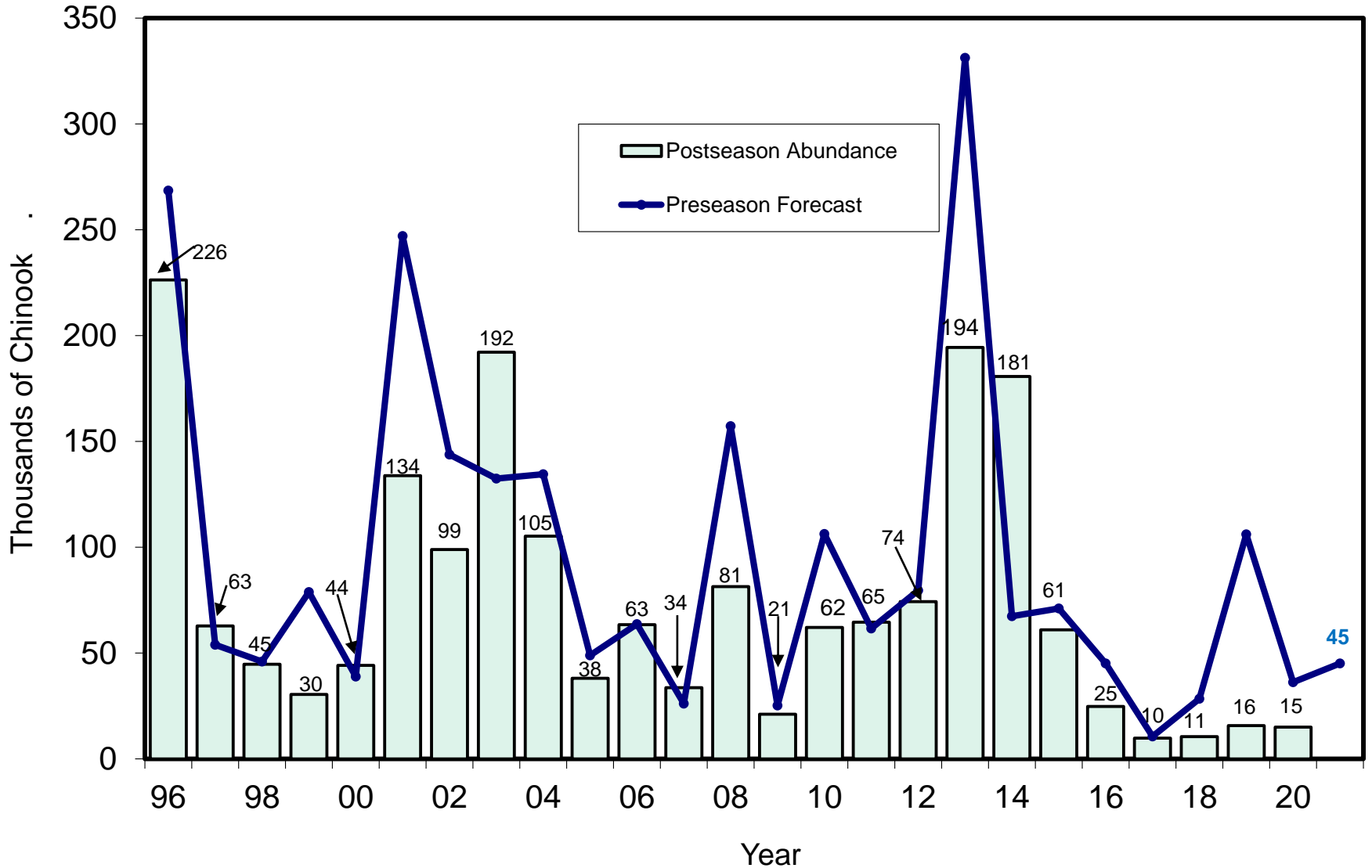
# Columbia R. Tule Chinook Ocean Escapement Forecast for 2021 with Postseason Estimate and Preseason Forecast Comparison



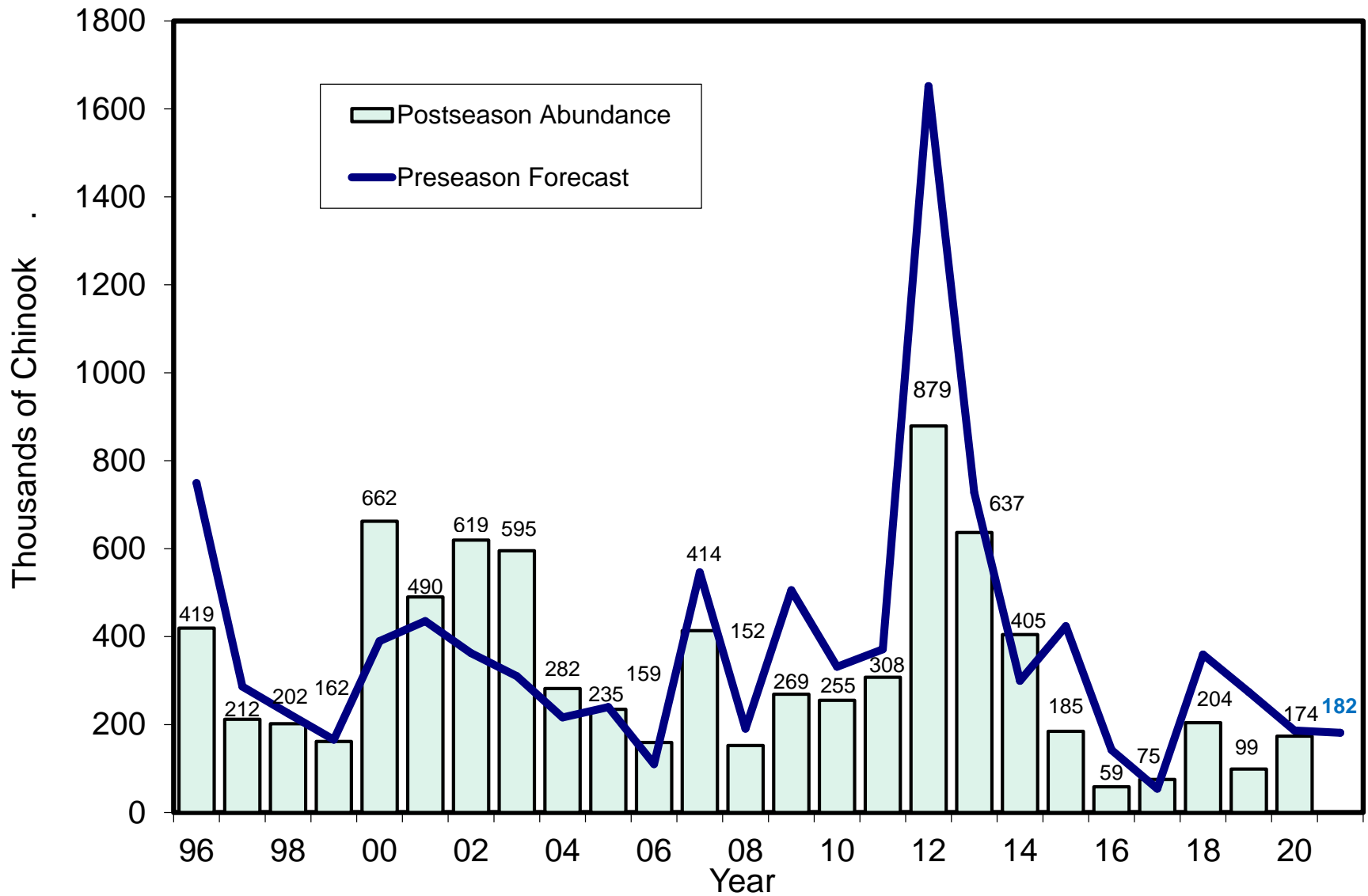
# Klamath R. Fall Chinook Age-3 Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison



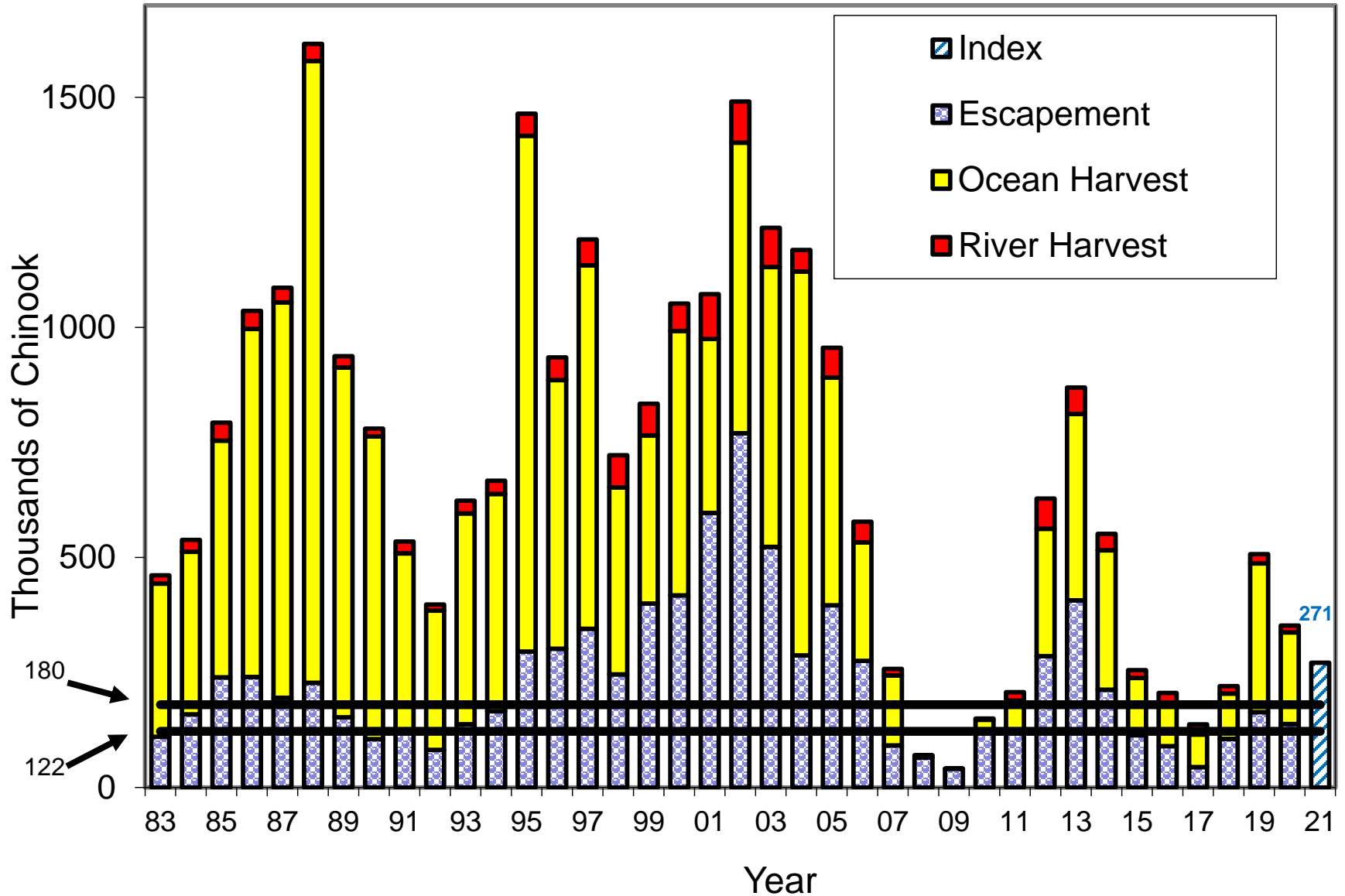
# Klamath R. Fall Chinook Age-4 Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison



# Klamath R. Fall Chinook Adult Forecast for 2021 with Preseason Forecast and Postseason Estimate Comparison



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



## Preliminary 2021 Ocean Abundance Forecasts for Select Salmon Stocks

Coho	Preseason Expectations	Comments
<b>Oregon Production Index (OPI)</b>		
Hatchery	1,607,900	1,422,200 more than 2020 Forecast
Oregon Coast Natural	125,000	42,000 more than 2020 Forecast
Lower Columbia Natural	39,200	14,400 more than 2020 Forecast

### Chinook

Sacramento Index (Fall Chinook)	271,000	202,200 less than 2020 Forecast
Klamath	age 3 - 135,600 age 4 - 45,100	14,000 less than 2020 Forecast 8,900 more than 2020 Forecast
Rogue Fall	Index - 274,100	17,200 more than 2020 Forecast
Oregon Coast North Migrating	Above recent year average	Increasing spawner counts

### Columbia River Chinook <sup>1/</sup>

Tules	119,900	22,700 more than 2020 Forecast
Fall Brights	460,900	127,100 more than 2020 Forecast
Lower River Wild	20,000	300 more than 2020 Forecast
Upriver Spring	75,200	6,500 less than 2020 Forecast
Willamette Spring	50,000	9,200 more than 2020 Forecast

<sup>1/</sup> Preseason expectations to the mouth of the Columbia River.

**Oregon Coastal Natural Coho Spawning Escapement Estimates, 2006-2020**

Component and Basin	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2006-2020 Avg.
<b>NORTHERN</b>																
Necanicum	750	431	1,055	3,827	4,445	2,120	902	798	5,727	847	936	529	393	698	708	1,611
Nehalem	11,614	14,033	17,205	21,753	32,215	15,322	2,963	4,539	30,577	3,079	7,549	5,486	4,190	12,383	11,217	12,942
Tillamook	8,774	2,295	4,828	16,251	14,890	19,250	1,686	4,402	20,090	1,345	7,102	2,927	2,035	3,961	3,995	7,589
Nestucca	1,876	394	1,844	4,252	1,947	7,857	1,751	946	6,369	1,029	2,412	4,495	1,072	4,602	6,134	3,132
Ind. Tribs.	1,121	376	639	2,052	1,473	1,341	218	271	4,607	440	699	206	262	616	694	1,001
<b>TOTAL</b>	<b>24,135</b>	<b>17,529</b>	<b>25,571</b>	<b>48,135</b>	<b>54,970</b>	<b>45,890</b>	<b>7,520</b>	<b>10,956</b>	<b>67,370</b>	<b>6,740</b>	<b>18,698</b>	<b>13,643</b>	<b>7,952</b>	<b>22,260</b>	<b>22,748</b>	<b>26,274</b>
<b>NORTH CENTRAL</b>																
Salmon	513	59	652	753	1,382	3,636	297	1,165	3,680	332	1,054	450	103	215	492	986
Siletz	5,205	2,197	20,634	24,070	6,283	33,094	4,495	7,660	19,496	2,216	3,015	5,202	4,064	4,509	5,330	9,831
Yaquina	4,247	3,158	10,913	11,182	8,589	19,074	6,268	3,553	25,582	2,400	3,730	2,491	4,672	3,452	5,423	7,649
Beaver Ck.	1,950	611	1,218	3,575	2,072	2,389	1,878	2,015	6,564	332	1,709	1,553	494	814	593	1,851
Alsea	1,972	2,146	13,320	14,638	9,688	28,337	8,470	9,283	25,786	6,185	7,375	4,377	5,112	4,915	5,794	9,827
Siuslaw	5,869	3,552	17,491	30,607	25,983	28,082	11,946	14,118	38,896	10,352	9,141	7,129	6,635	5,881	10,994	15,112
Ind. Tribs.	1,468	547	3,910	1,610	2,548	4,487	492	1,929	1,890	856	464	1,646	958	289	824	1,595
<b>TOTAL</b>	<b>21,224</b>	<b>12,270</b>	<b>68,138</b>	<b>86,435</b>	<b>56,545</b>	<b>119,099</b>	<b>33,846</b>	<b>39,723</b>	<b>121,894</b>	<b>22,673</b>	<b>26,488</b>	<b>22,848</b>	<b>22,038</b>	<b>20,075</b>	<b>29,450</b>	<b>46,850</b>
<b>SOUTH CENTRAL</b>																
Umpqua	18,092	11,783	37,868	57,984	70,019	94,655	20,948	27,016	66,272	14,860	7,494	15,492	24,035	19,158	24,859	34,036
Coos	11,266	1,329	14,881	26,979	27,658	10,999	9,414	6,884	38,880	3,030	4,624	2,689	7,292	13,289	6,775	12,399
Coquille	28,577	13,968	8,791	22,286	23,564	55,667	5,911	23,637	41,660	3,357	9,494	4,641	5,688	11,841	7,366	17,763
Floras Ck.	1,104	340	786	3,203	11,329	9,217	2,502	1,936	1,022	1,585	942	693	628	904	766	2,464
Sixes R.	294	97	43	176	92	334	34	567	410	168	120	69	174	155	179	194
Coastal Lakes	24,127	8,955	23,608	17,349	38,744	20,281	18,922	13,659	22,010	4,729	8,044	1,302	6,704	7,433	9,727	15,040
Ind. Tribs.	-	-	0	188	484	101	48	33	106	0	0	0	10	23	0	76
<b>TOTAL</b>	<b>83,460</b>	<b>36,472</b>	<b>85,977</b>	<b>128,165</b>	<b>171,890</b>	<b>191,254</b>	<b>57,800</b>	<b>73,732</b>	<b>170,360</b>	<b>27,729</b>	<b>30,718</b>	<b>24,886</b>	<b>44,531</b>	<b>52,803</b>	<b>49,671</b>	<b>81,963</b>
<b>SOUTH ROGUE</b>																
<b>Rogue</b>	<b>3,911</b>	<b>5,136</b>	<b>414</b>	<b>2,566</b>	<b>3,671</b>	<b>4,545</b>	<b>5,474</b>	<b>11,210</b>	<b>2,409</b>	<b>4,072</b>	<b>6,302</b>	<b>4,526</b>	<b>8,266</b>	<b>2,156</b>	<b>1,335</b>	<b>4,400</b>
<b>COASTWIDE</b>	<b>132,730</b>	<b>71,407</b>	<b>180,100</b>	<b>265,301</b>	<b>287,076</b>	<b>360,788</b>	<b>104,640</b>	<b>135,621</b>	<b>362,033</b>	<b>61,214</b>	<b>82,206</b>	<b>65,903</b>	<b>82,787</b>	<b>97,294</b>	<b>103,204</b>	<b>159,487</b>