

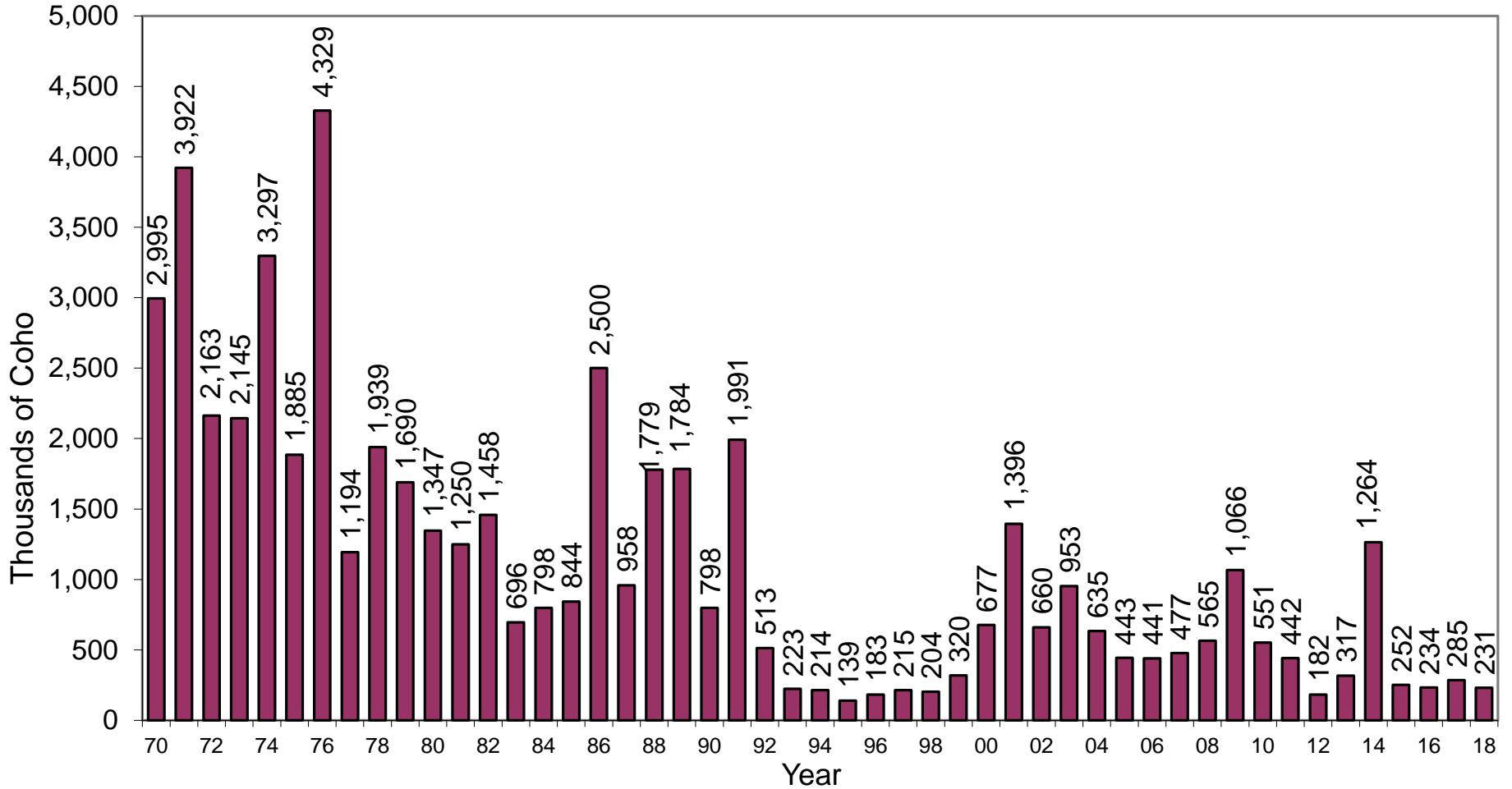
## 2019 Ocean Fishery Process Schedule

February 27	WDFW Public Meeting * 2019 Forecasts * 2019 Salmon season discussions	Olympia, WA
February 27	CDFW Public Meeting * 2019 Forecasts * 2019 Salmon season discussions	Santa Rosa, CA
February 28	Ocean Salmon Industry Group Meeting * 2019 Forecasts * 2019 Salmon season discussions	Newport, OR
March 7-12	Pacific Fishery Management Council * Adopt 2019 ocean salmon alternatives for public review	Vancouver, WA Hilton
March 15	Oregon Fish and Wildlife Commission * Ocean Salmon (informational)	Salem, OR
March 19	North of Falcon I (Public Meeting) * Ocean/Puget S./Col. R. area salmon season negotiations	Olympia, WA
March 25	PFMC Public Options Hearing * Public input on 2019 season alternatives	Coos Bay, OR Red Lion
March 25	PFMC Public Options Hearing * Public input on 2019 season alternatives	Westport, WA
March 26	PFMC Public Options Hearing * Public input on 2019 season alternatives	Ukiah, CA
April 2	North of Falcon (Public Meeting) * Ocean and Columbia River	Ridgefield, WA
April 10-15	Pacific Fishery Management Council * Adopt 2019 ocean salmon fishery regulations	Rohnert Park, CA DoubleTree
April 19	Oregon Fish and Wildlife Commission * Adopt state waters ocean salmon fishery regulations	St. Helens, OR

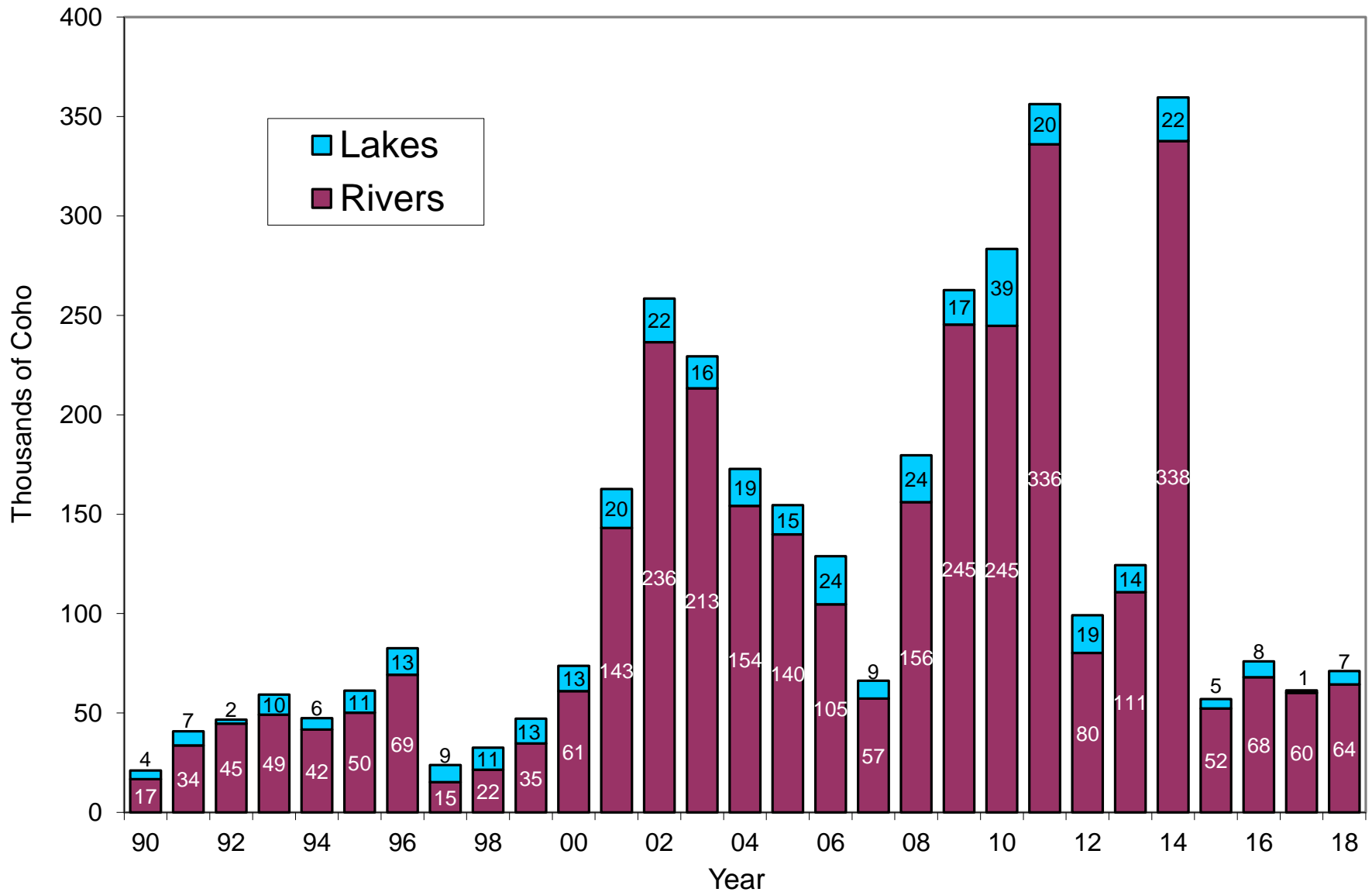
# **Review of 2018 Salmon Spawning Escapements and Abundance**

- 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, 1970-2018

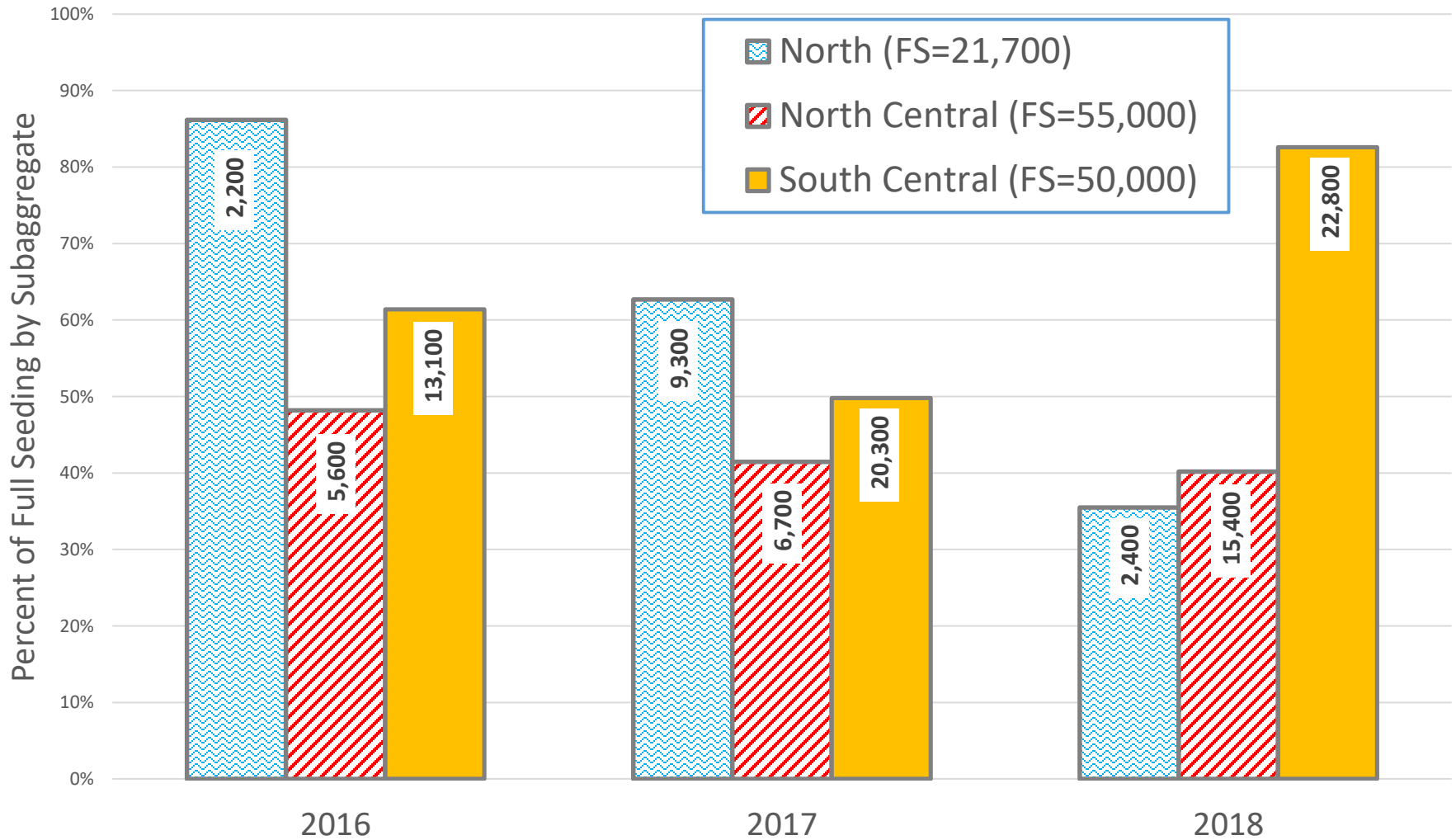


# OCN Coho Spawner Escapement Rivers and Lakes, 1990-2018

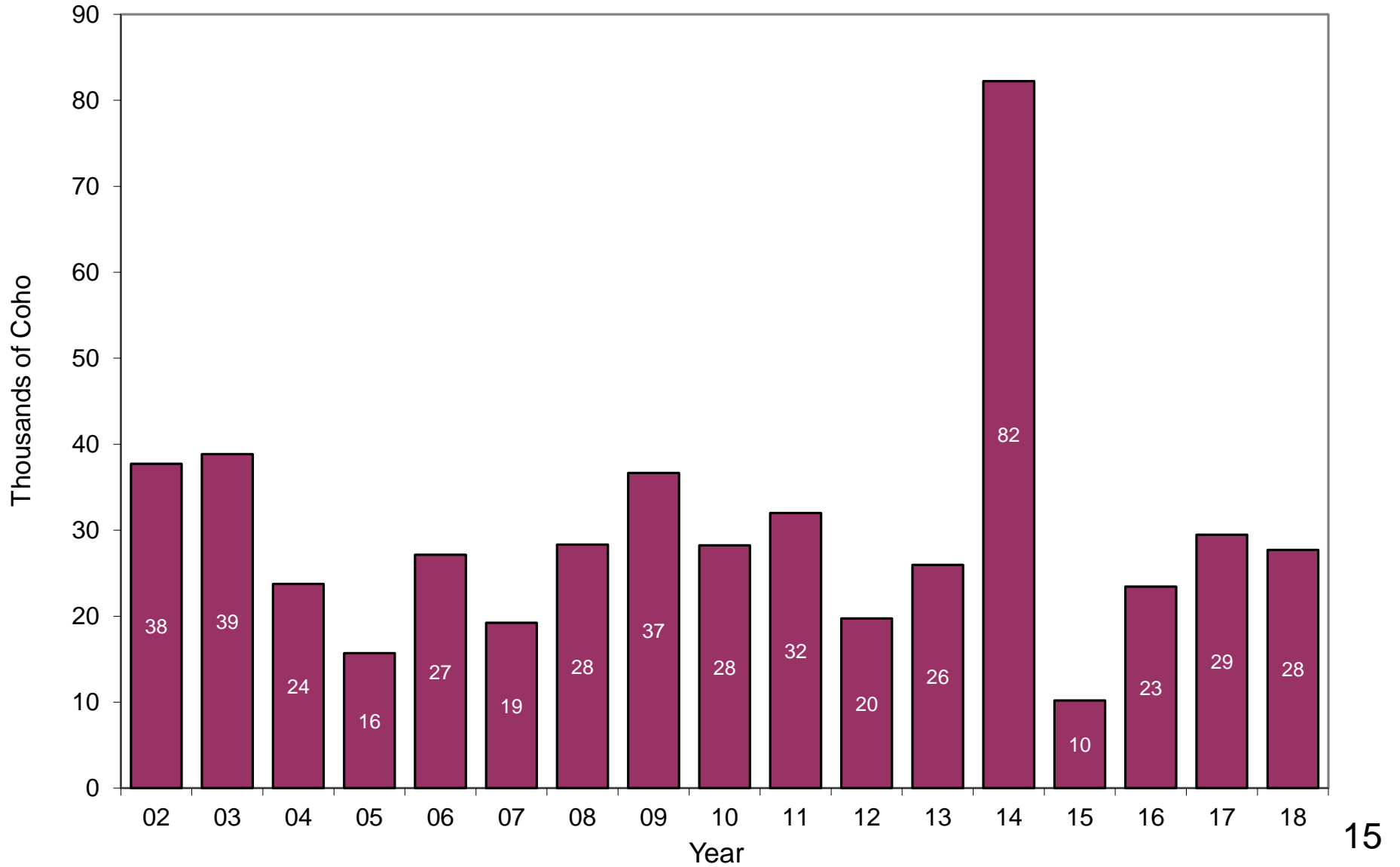


# OCN Spawner Escapement by Sub-Aggregate

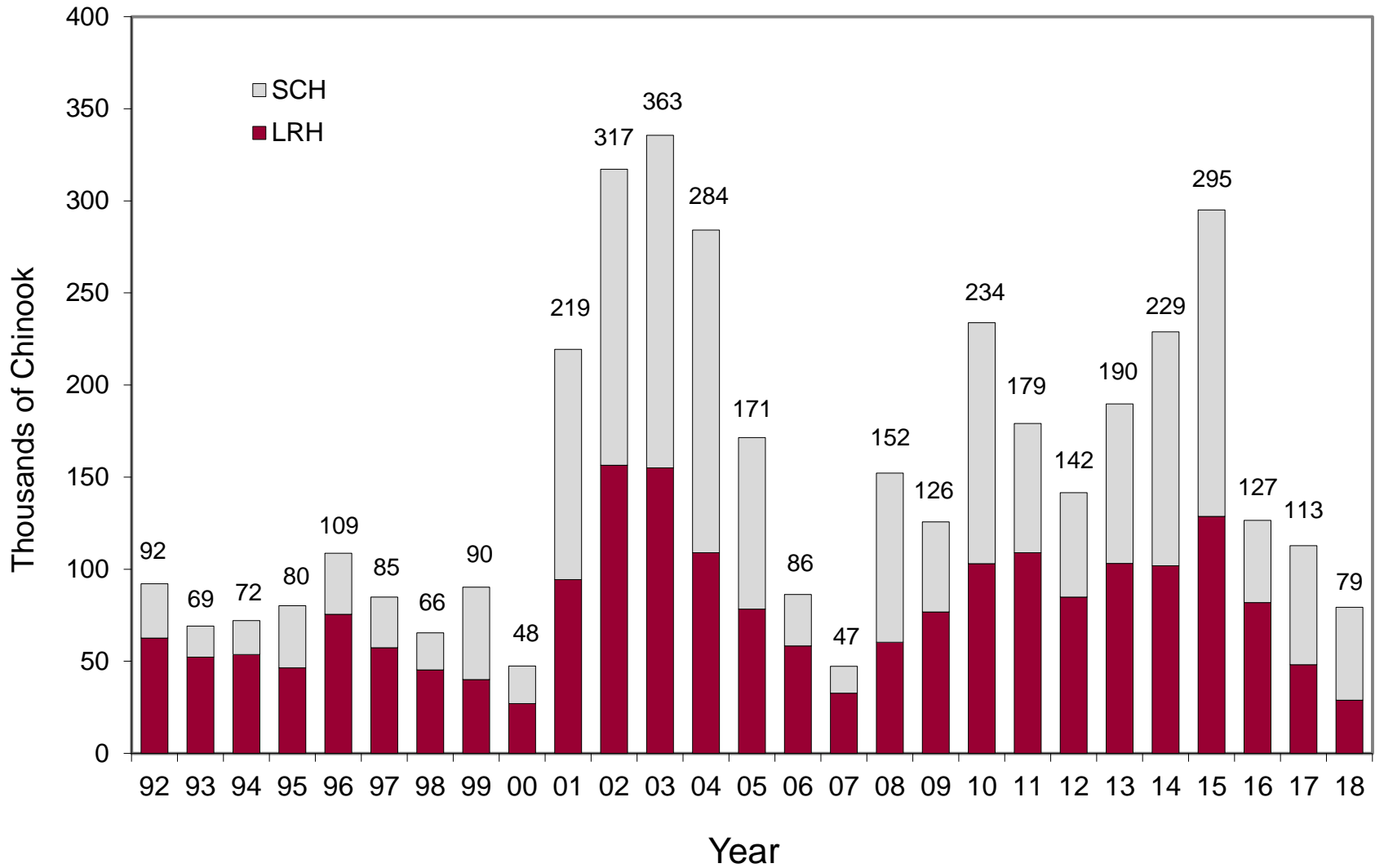
(percent of full-seeding (FS), with spawner numbers included within bars)



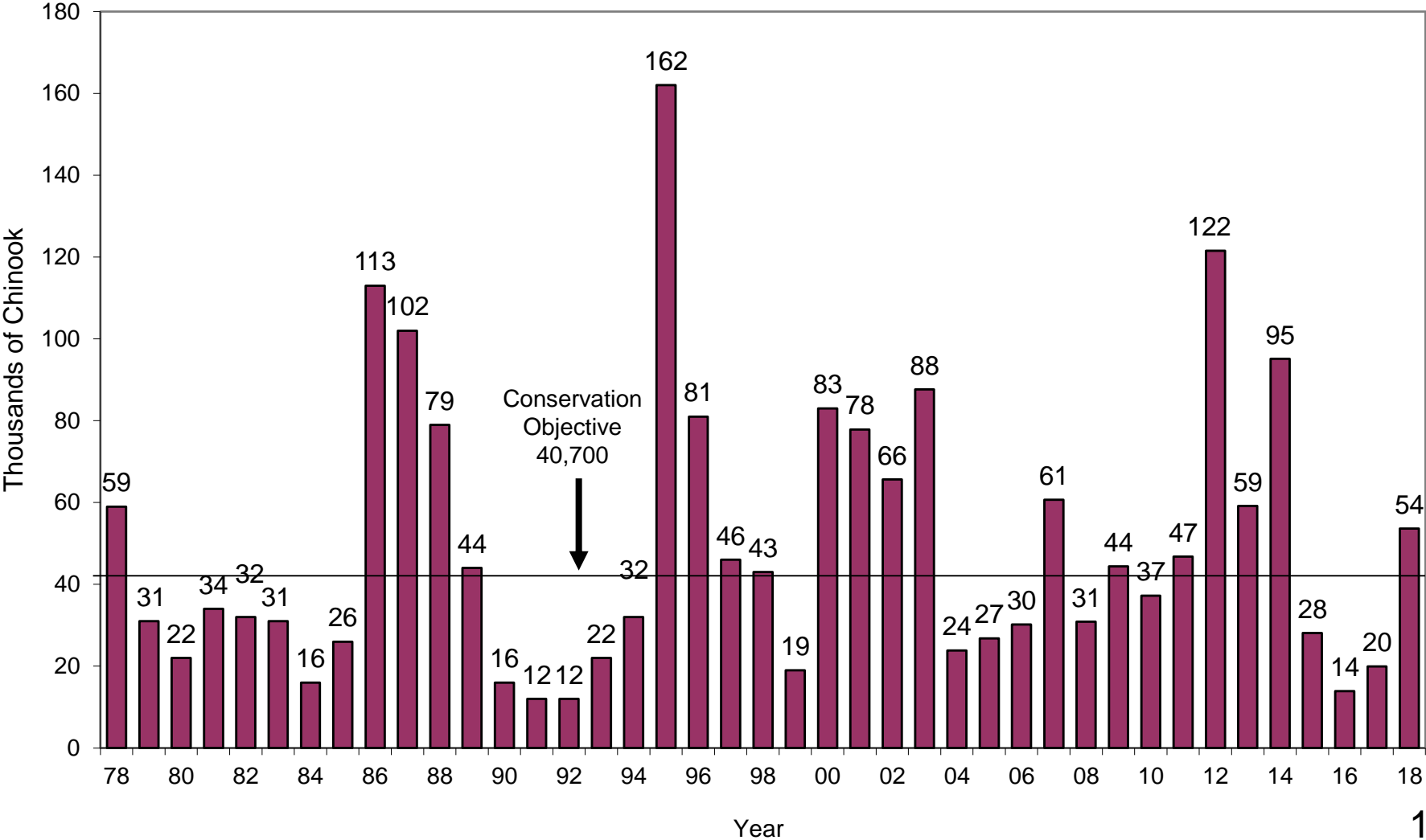
# LCN Coho Escapement, 2002-2018



# Columbia River Tule Chinook Ocean Escapement, 1992-2018

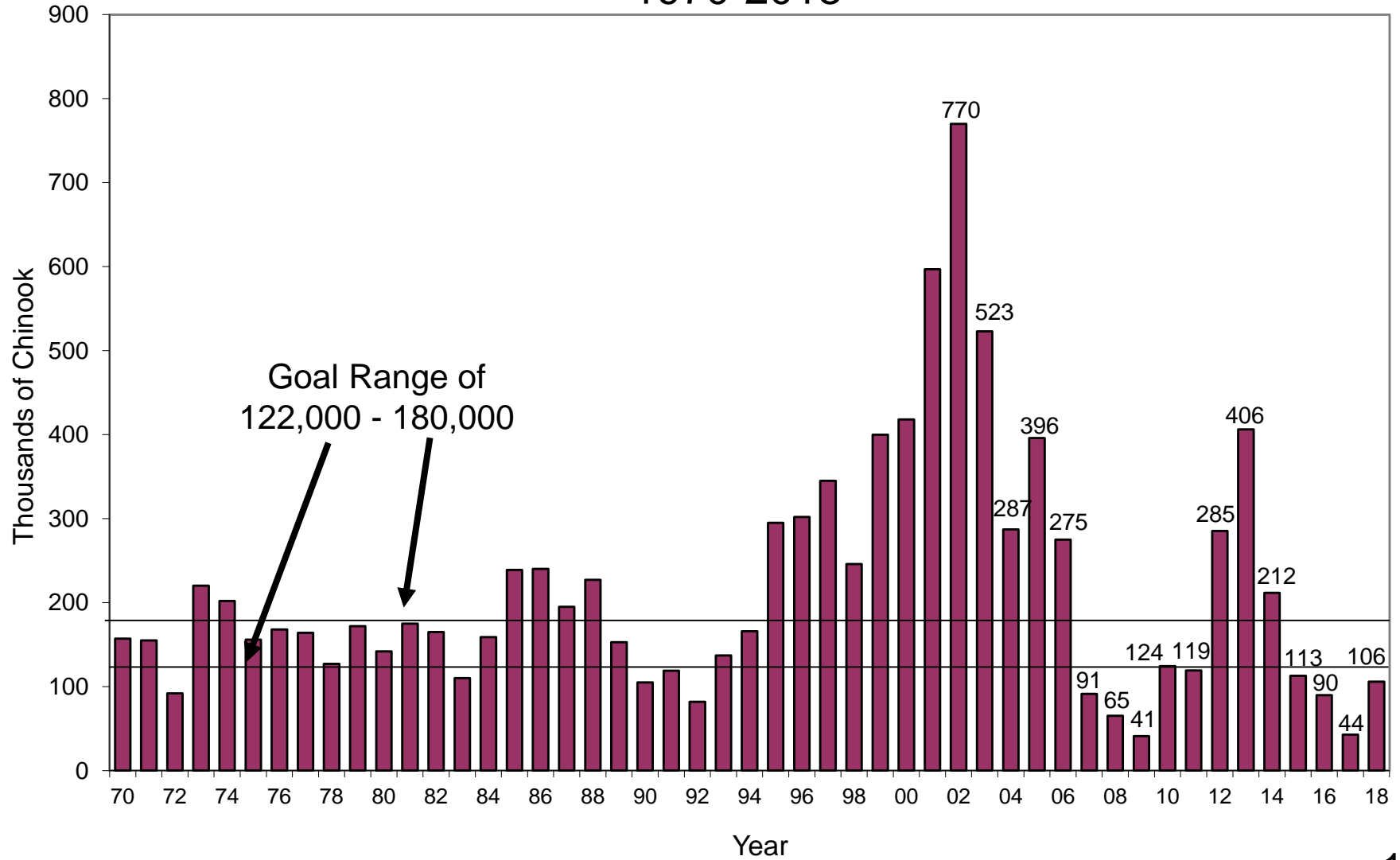


# Klamath River Natural Fall Chinook Adult Spawner Escapement, 1978-2018





# Sacramento River Adult Fall Chinook Escapement, 1970-2018



## 2018 Ocean Abundance Estimates for Select Salmon Stocks Preseason vs. Postseason

Coho	Preseason Expectations	Postseason	Post - Pre
<b>Oregon Production Index (OPI)</b>			
Hatchery	294,100	149,400	-144,700
Oregon Coast Natural	54,900	81,300	26,400
Lower Columbia Natural	21,900	29,700	7,800

### Chinook

Sacramento Index (corrected on 3/1/19) (Fall Chinook)	<b>229,400</b>	<b>223,900</b>	<b>-5,500</b>
Klamath	age 3 - 330,000 age 4 - 28,400	397,600 11,000	67,600 -17,400
Rogue Fall	Index - 462,800	NA	
Oregon Coast North Migrating	Poor Returns	Lower survey results and returns.	

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

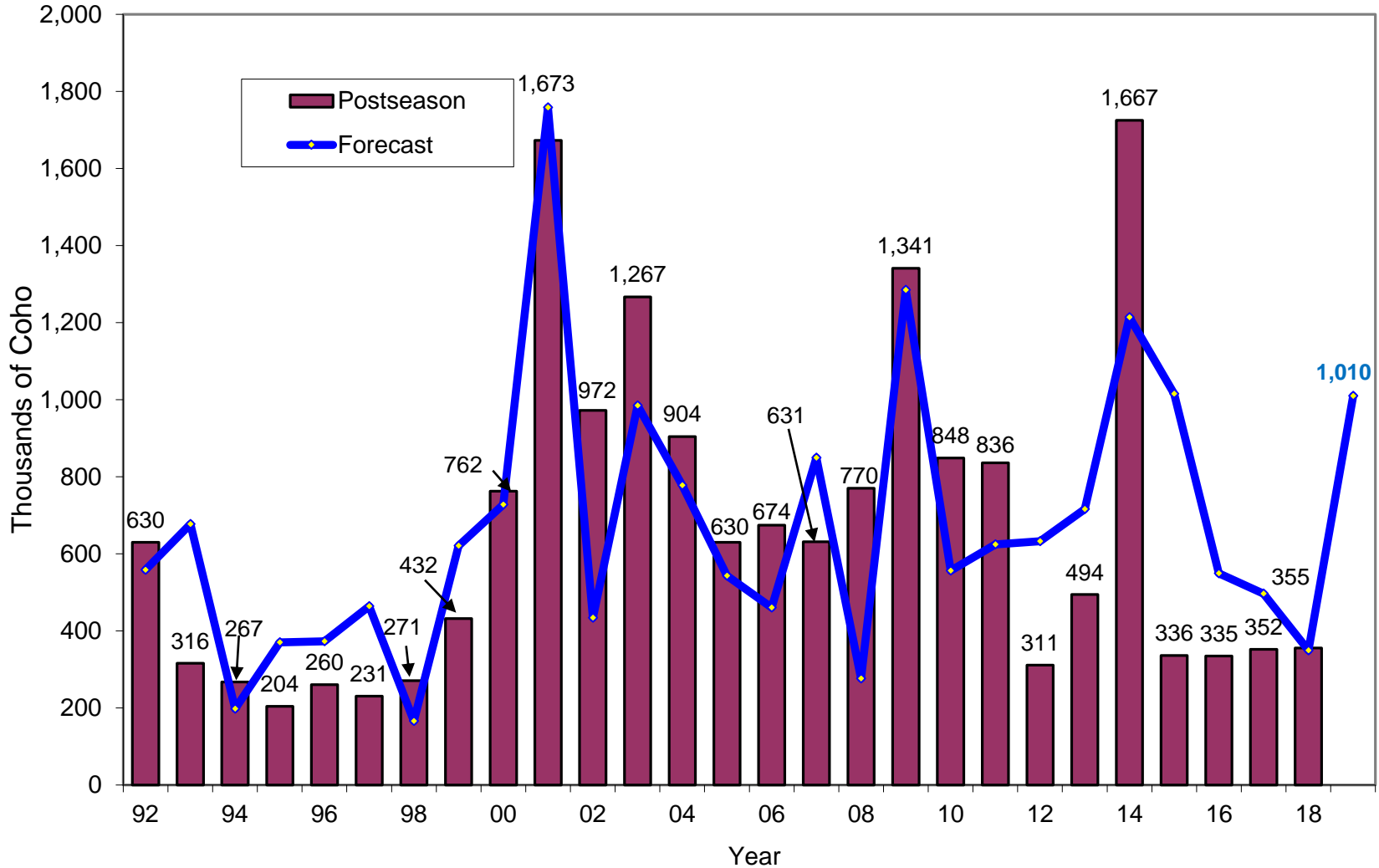
Tules	112,500	79,300	-33,200
Fall Brights	253,100	211,700	-41,400
Lower River Wild	7,600	8,300	700
Upriver Spring	166,700	115,100	-51,600
Willamette Spring	53,800	37,400	-16,400

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

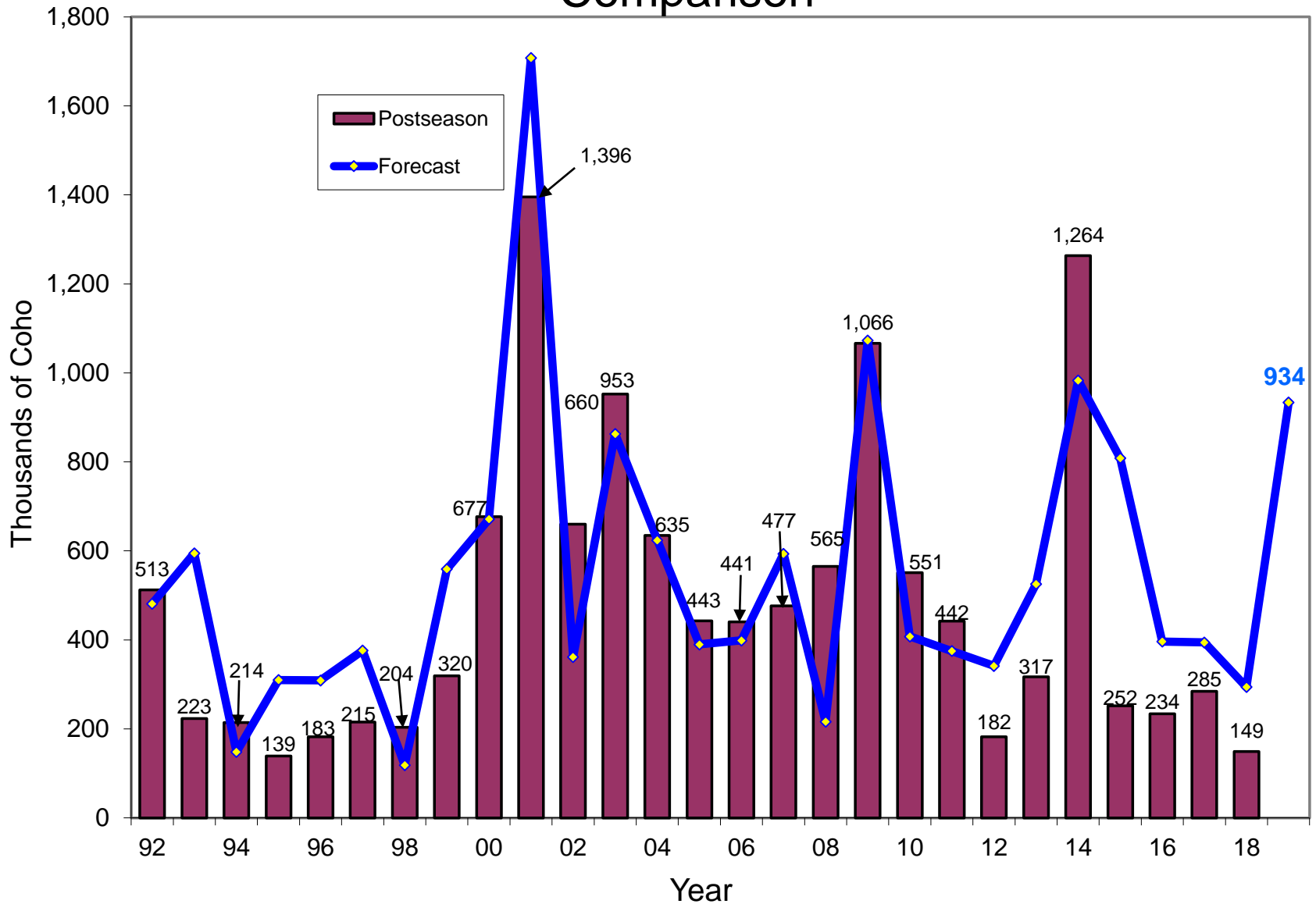
# Review of 2019 Salmon Forecasts

- 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)
- 2019 Forecasts
  - Comparison to Postseason Estimates and Preseason Forecasts

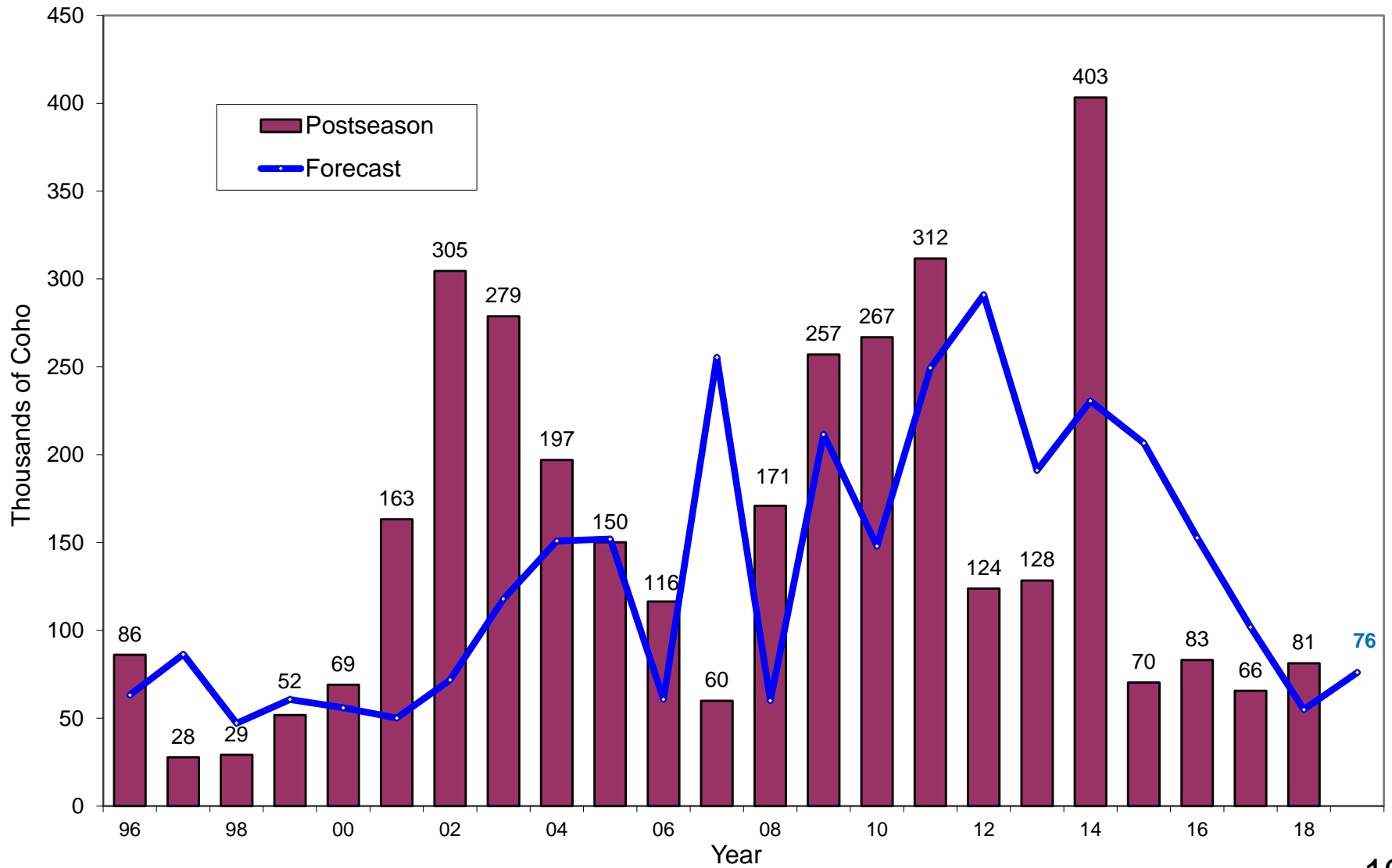
# Total OPI Coho Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



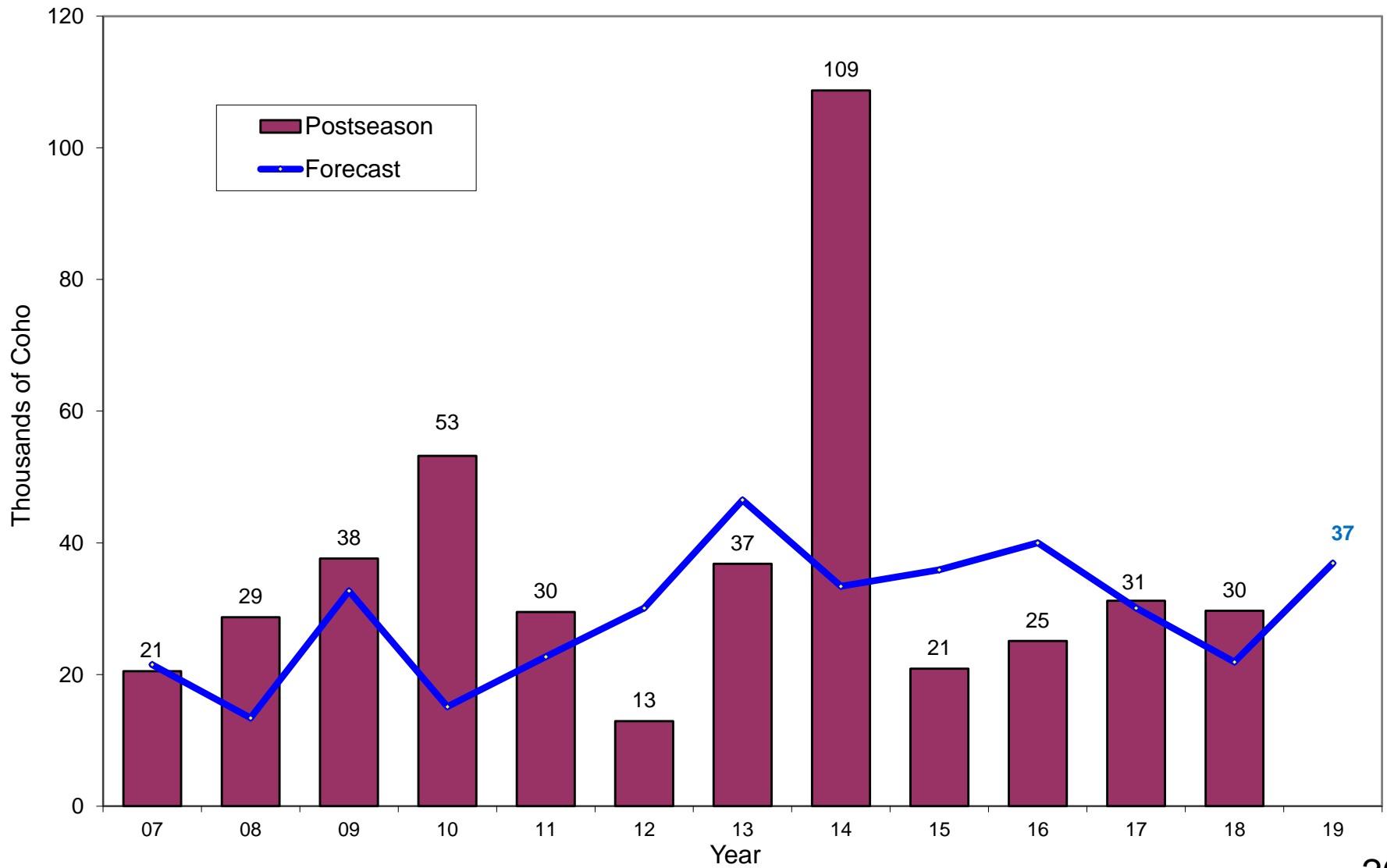
# OPI Hatchery Coho Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



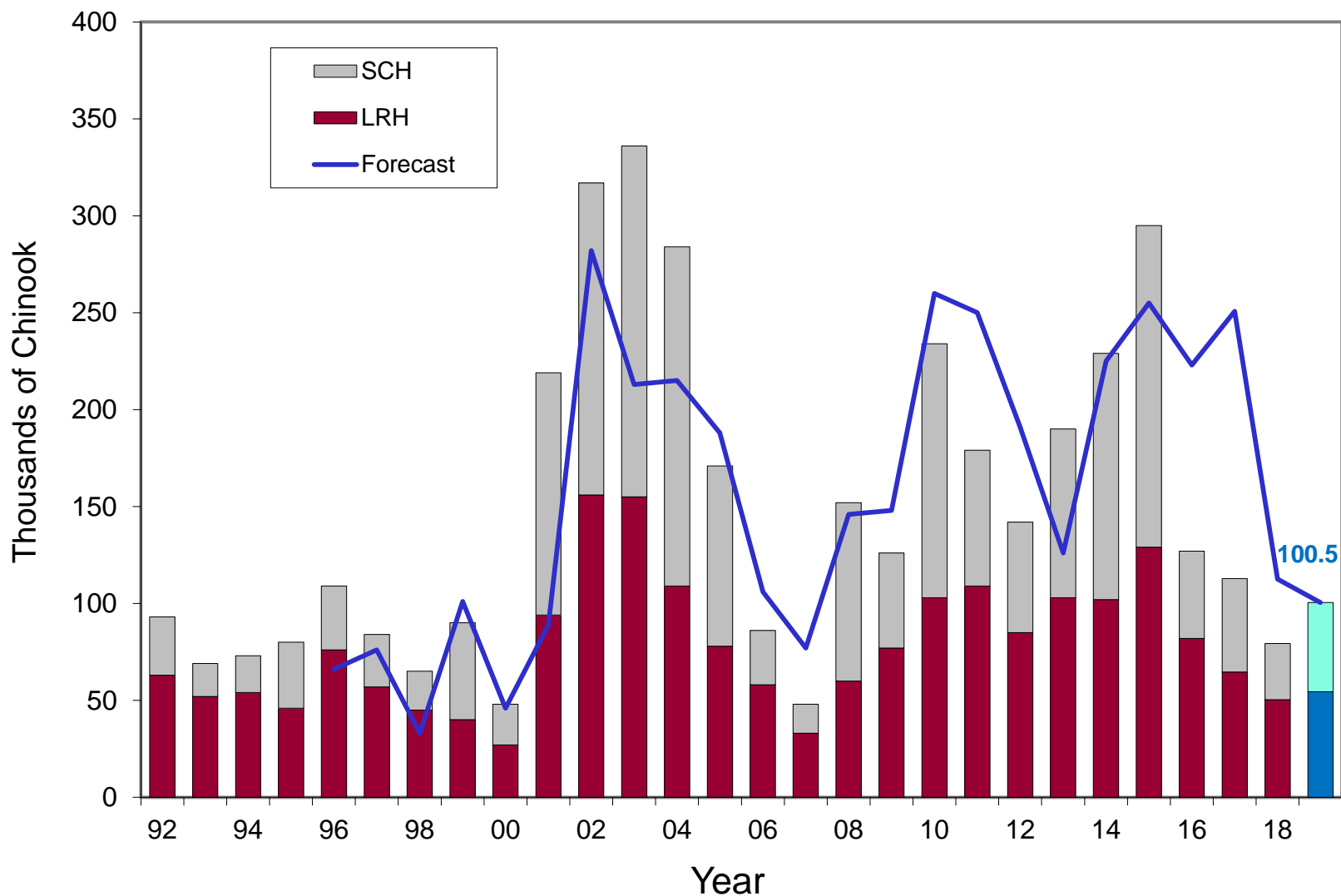
# OCN Coho Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



# LCN Coho Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison

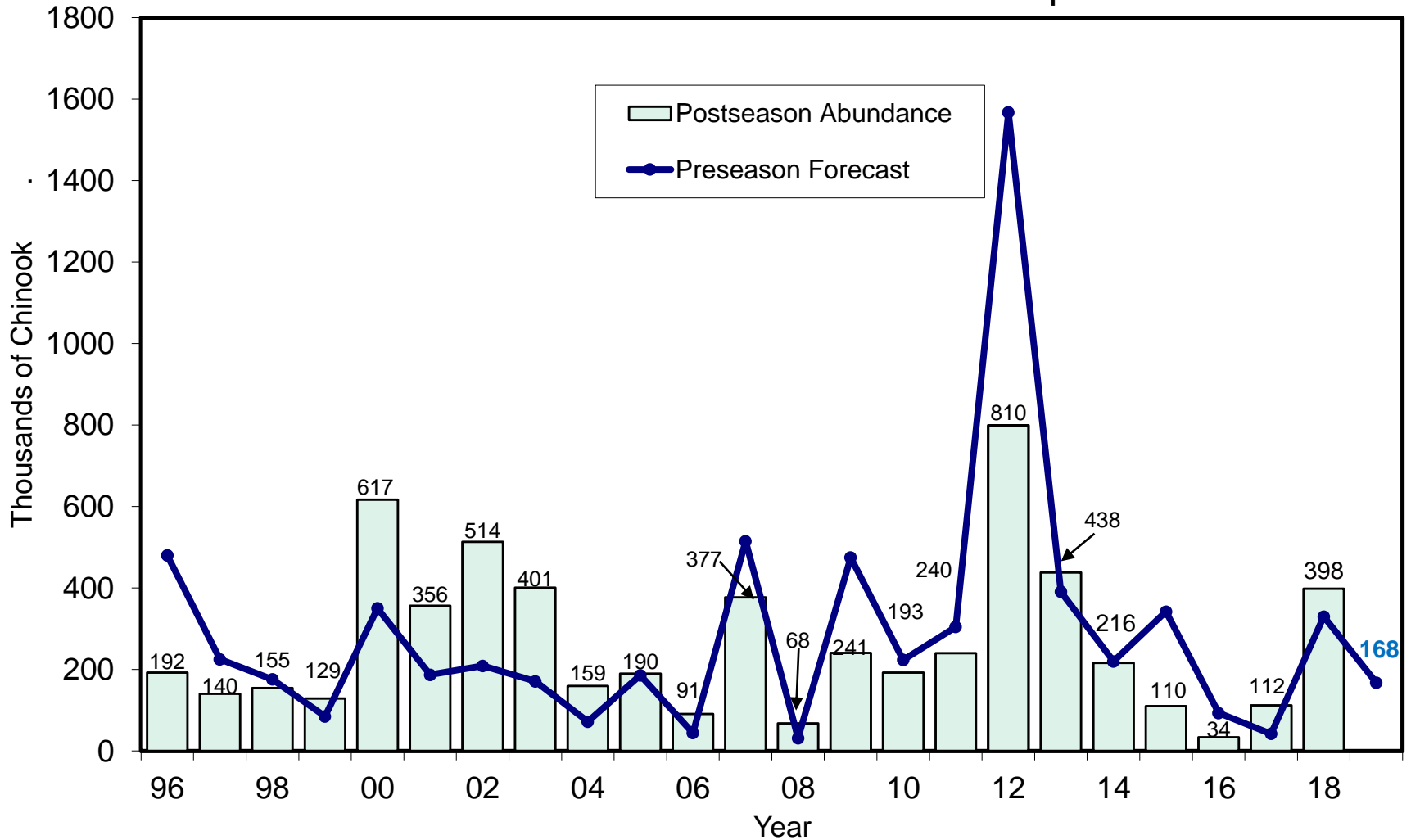


# Columbia R. Tule Chinook Ocean Escapement Forecast for 2019 with Postseason Estimate and Preseason Forecast Comparison

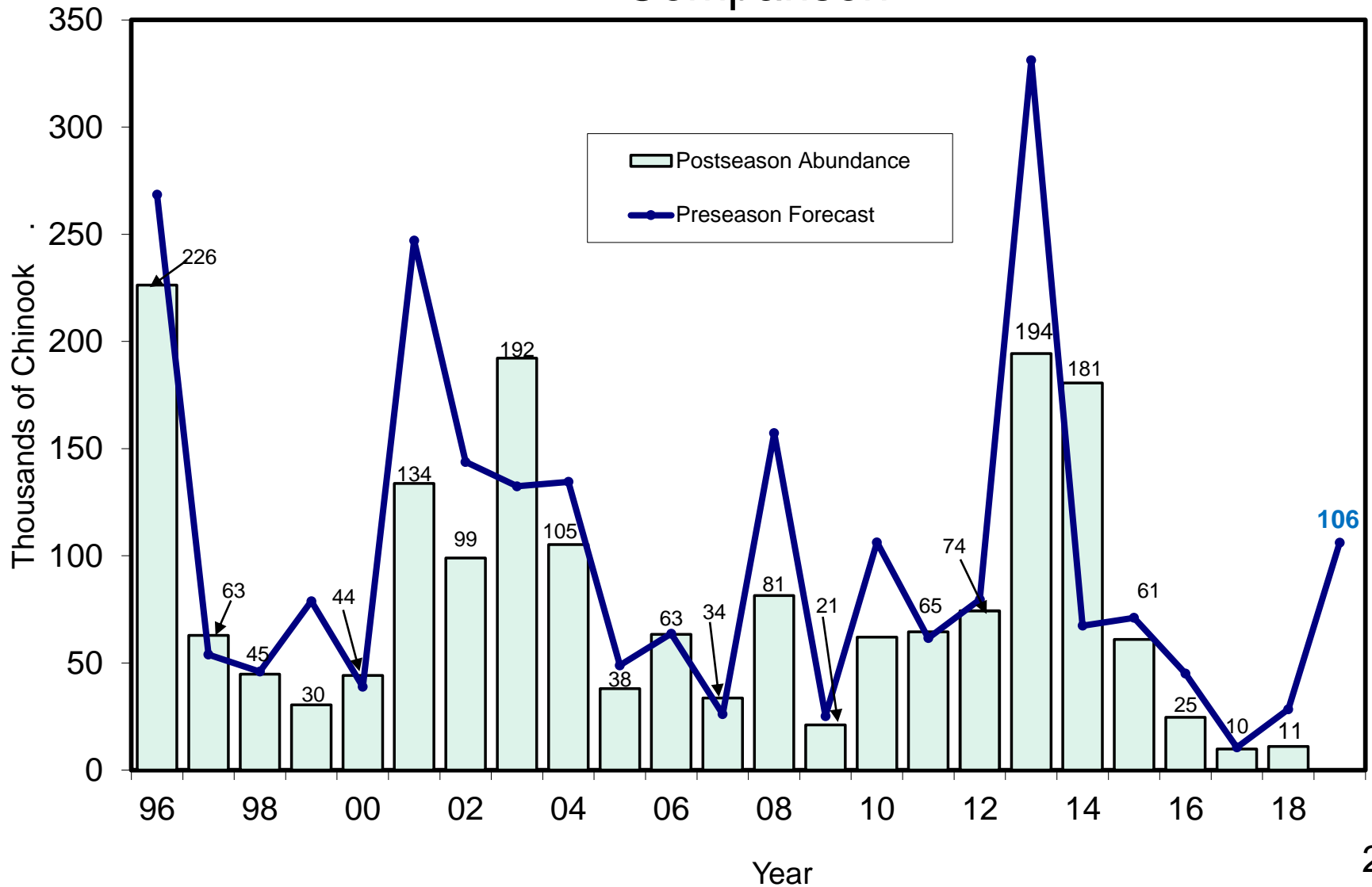




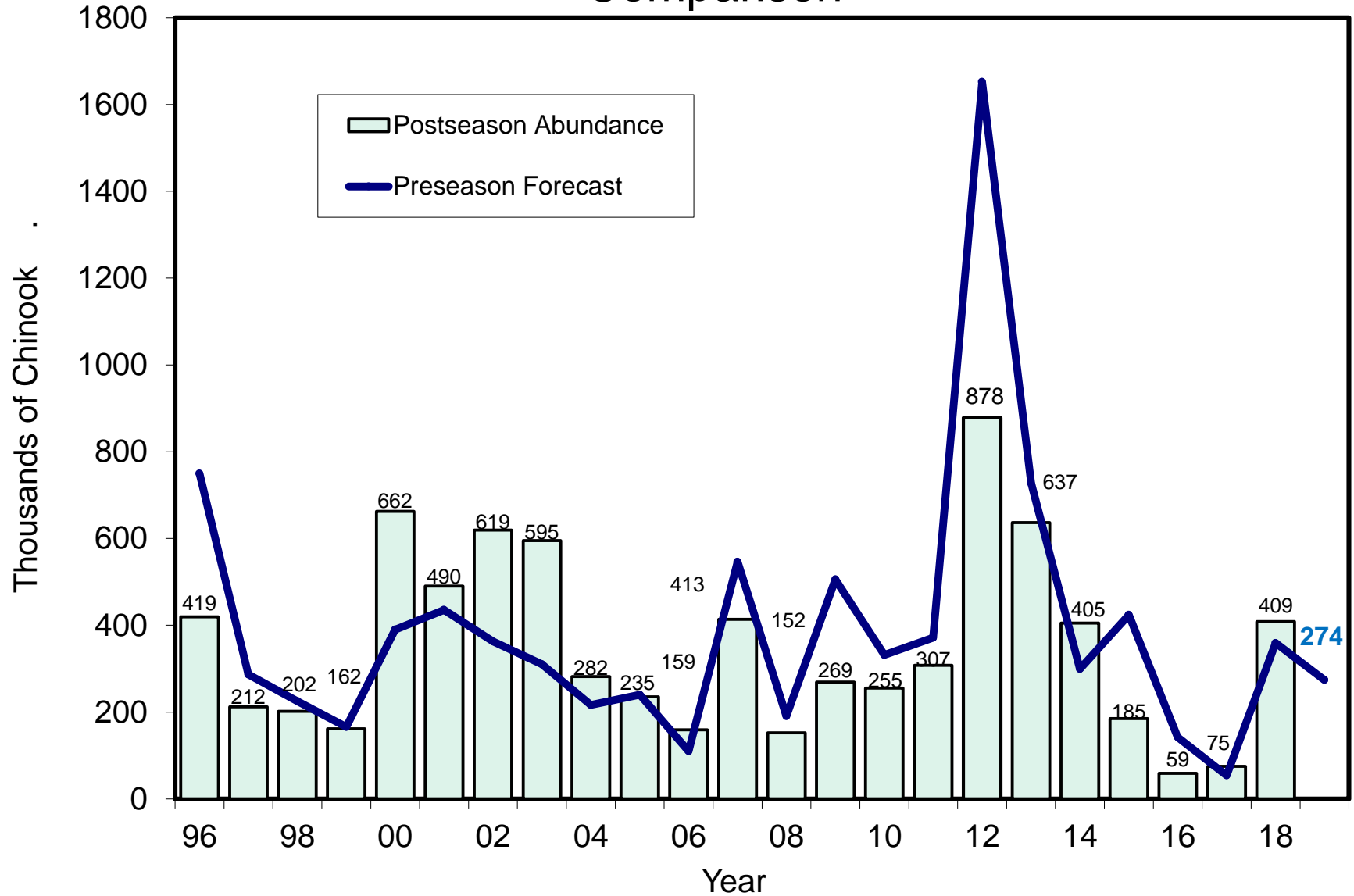
## Klamath R. Fall Chinook Age-3 Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



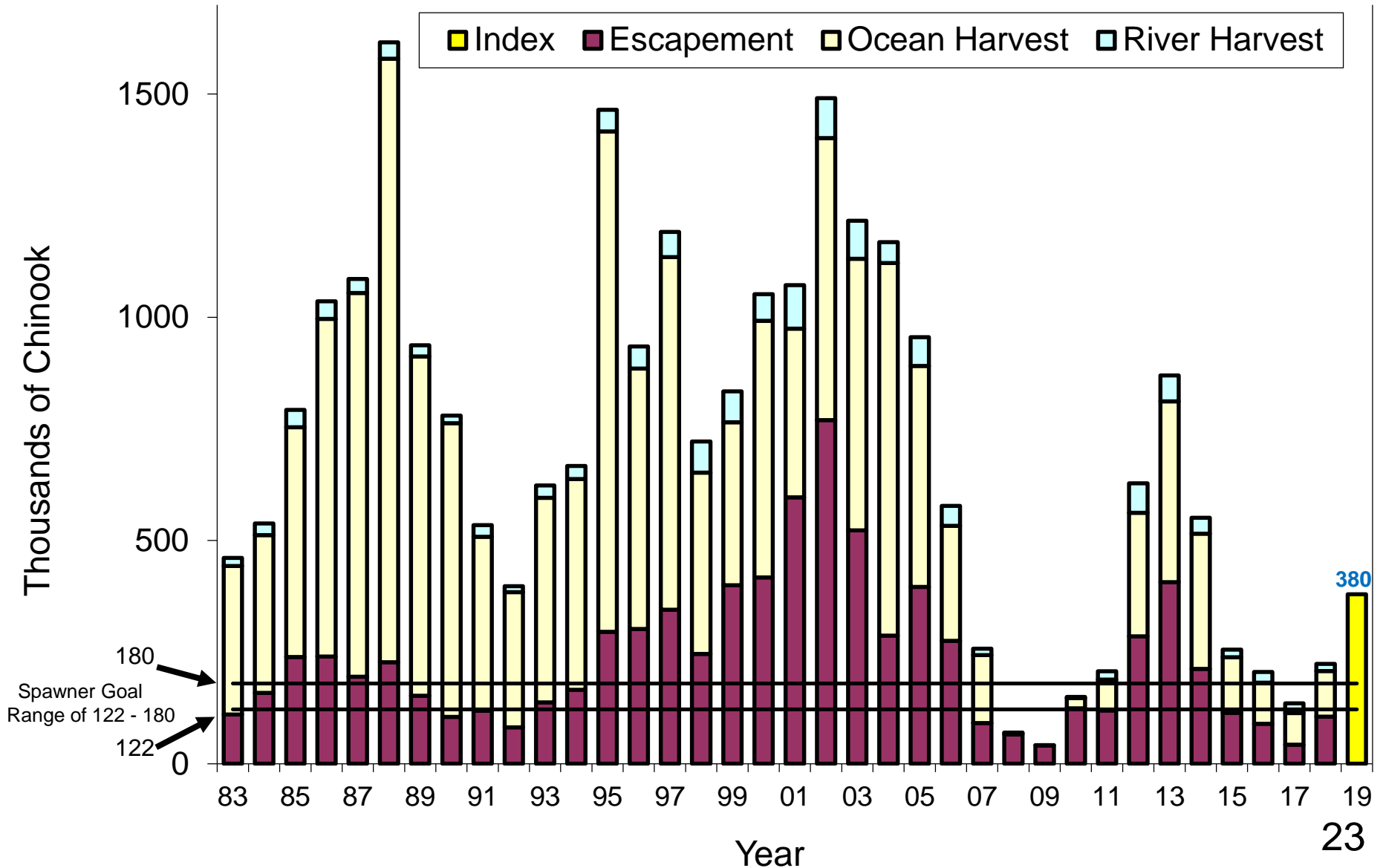
# Klamath R. Fall Chinook Age-4 Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



# Klamath R. Fall Chinook Adult Forecast for 2019 with Preseason Forecast and Postseason Estimate Comparison



# Sacramento R. Fall Chinook Escapements and Harvest, 1983-2018; and 2019 Index



## Preliminary 2019 Ocean Abundance Forecasts for Select Salmon Stocks

Coho	Preseason Expectations	Comments
<b>Oregon Production Index (OPI)</b>		
Hatchery	933,500	639,400 more than 2018 Forecast
Oregon Coast Natural	76,100	21,200 more than 2018 Forecast
Lower Columbia Natural	36,900	15,000 more than 2018 Forecast

### Chinook

Sacramento Index (Fall Chinook)	379,600	150,200 more than 2018 Forecast
Klamath	age 3 - 167,500 age 4 - 106,100	162,500 less than 2018 Forecast 77,700 more than 2018 Forecast
Rogue Fall	Index - 383,500	79,300 less than 2018 Forecast
Oregon Coast North Migrating	Below recent year average	Decreasing spawner counts

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

Tules	100,500	12,000 less than 2018 Forecast
Fall Brights	239,900	13,200 less than 2018 Forecast
Lower River Wild	13,700	6,100 more than 2018 Forecast
Upriver Spring	99,300	67,400 less than 2018 Forecast
Willamette Spring	40,200	13,600 less than 2018 Forecast

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

**Oregon Coastal Natural Coho Spawning Escapement Estimates, 2004-2018**

Component and Basin	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2004-2018 Avg.
<b>NORTHERN</b>																
Necanicum	2,198	1,218	750	431	1,055	3,827	4,445	2,120	902	798	5,727	847	936	529	393	1,745
Nehalem	18,736	10,451	11,614	14,033	17,205	21,753	32,215	15,322	2,963	4,539	30,577	3,079	7,549	5,486	3,989	13,301
Tillamook	2,532	1,995	8,774	2,295	4,828	16,251	14,890	19,250	1,686	4,402	20,090	1,345	7,102	2,927	1,976	7,356
Nestucca	4,695	686	1,876	394	1,844	4,252	1,947	7,857	1,751	946	6,369	1,029	2,412	4,495	1,075	2,775
Ind. Tribs.	661	2,116	1,121	376	639	2,052	1,473	1,341	218	271	4,607	440	699	206	264	1,099
<b>TOTAL</b>	<b>28,822</b>	<b>16,466</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>7,697</b>	<b>26,276</b>
<b>NORTH CENTRAL</b>																
Salmon	1,642	79	513	59	652	753	1,382	3,636	297	1,165	3,680	332	1,054	450	105	1,053
Siletz	8,179	14,567	5,205	2,197	20,634	24,070	6,283	33,094	4,495	7,660	19,496	2,216	3,015	5,202	4,040	10,690
Yaquina	5,539	3,441	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	7,656
Beaver Ck.	4,569	2,264	1,950	611	1,218	3,575	2,072	2,389	1,878	2,015	6,564	332	1,709	1,553	494	2,213
Alsea	5,233	13,907	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	10,389
Siuslaw	8,729	16,907	5,869	3,552	17,491	30,607	25,983	28,082	11,946	14,118	38,896	10,352	9,141	7,129	6,688	15,699
Ind. Tribs.	8,179	242	1,468	547	3,910	1,610	2,548	4,487	492	1,929	1,890	856	464	1,646	972	2,083
<b>TOTAL</b>	<b>42,070</b>	<b>51,407</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>22,083</b>	<b>49,783</b>
<b>SOUTH CENTRAL</b>																
Umpqua	29,920	42,532	18,092	11,783	37,868	57,984	70,019	94,655	20,969	27,016	66,272	14,860	7,494	15,492	21,987	35,796
Coos	23,337	17,048	11,266	1,329	14,881	26,979	27,658	10,999	9,414	6,884	38,880	3,030	4,624	2,689	7,074	13,739
Coquille	22,138	11,806	28,577	13,968	8,791	22,286	23,564	55,667	5,911	23,637	41,660	3,357	9,494	4,641	5,201	18,713
Floras Ck.	7,446	506	1,104	340	786	3,203	11,329	9,217	2,502	1,936	1,022	1,585	942	693	278	2,859
Sixes R.	403	105	294	97	43	176	92	334	34	567	410	168	120	69	95	200
Coastal Lakes	18,642	14,725	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	16,120
Ind. Tribs.	-	-	-	-	0	188	484	101	48	33	106	0	0	0	10	88
<b>TOTAL</b>	<b>101,886</b>	<b>86,722</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>41,349</b>	<b>87,493</b>
<b>SOUTH ROGUE</b>																
<b>Rogue</b>	<b>24,509</b>	<b>9,957</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>4,529</b>	<b>8,266</b>	<b>6,465</b>
<b>COASTWIDE</b>	<b>197,287</b>	<b>164,552</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>65,906</b>	<b>79,395</b>	<b>170,017</b>