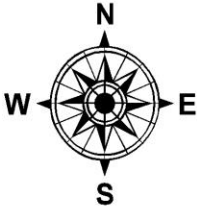


# 2017 Lynn Canal (District 15) Commercial Drift Gillnet Fishery Season Summary











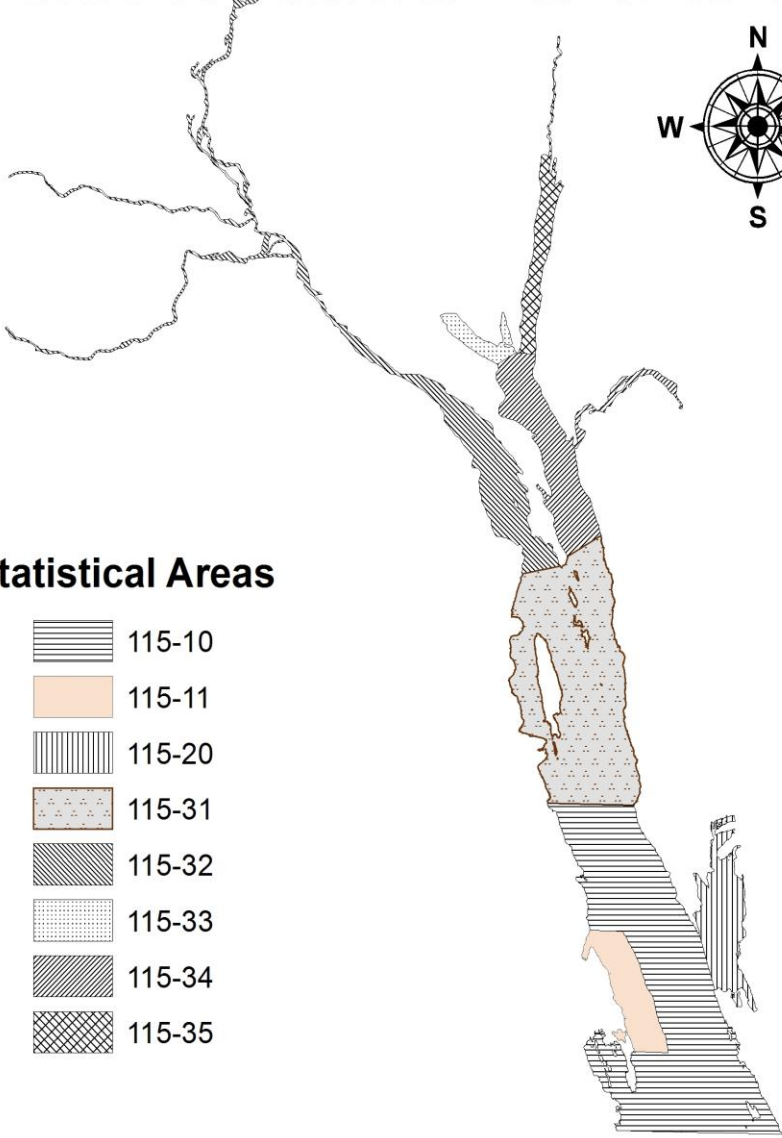
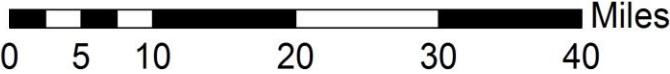
Mark Sogge  
Area Management Biologist  
2017 Drift Gillnet Task Force Meeting  
November 29, 2017  
Ketchikan, Alaska

# Lynn Canal District, Sections and Statistical Area Boundaries



## Statistical Areas

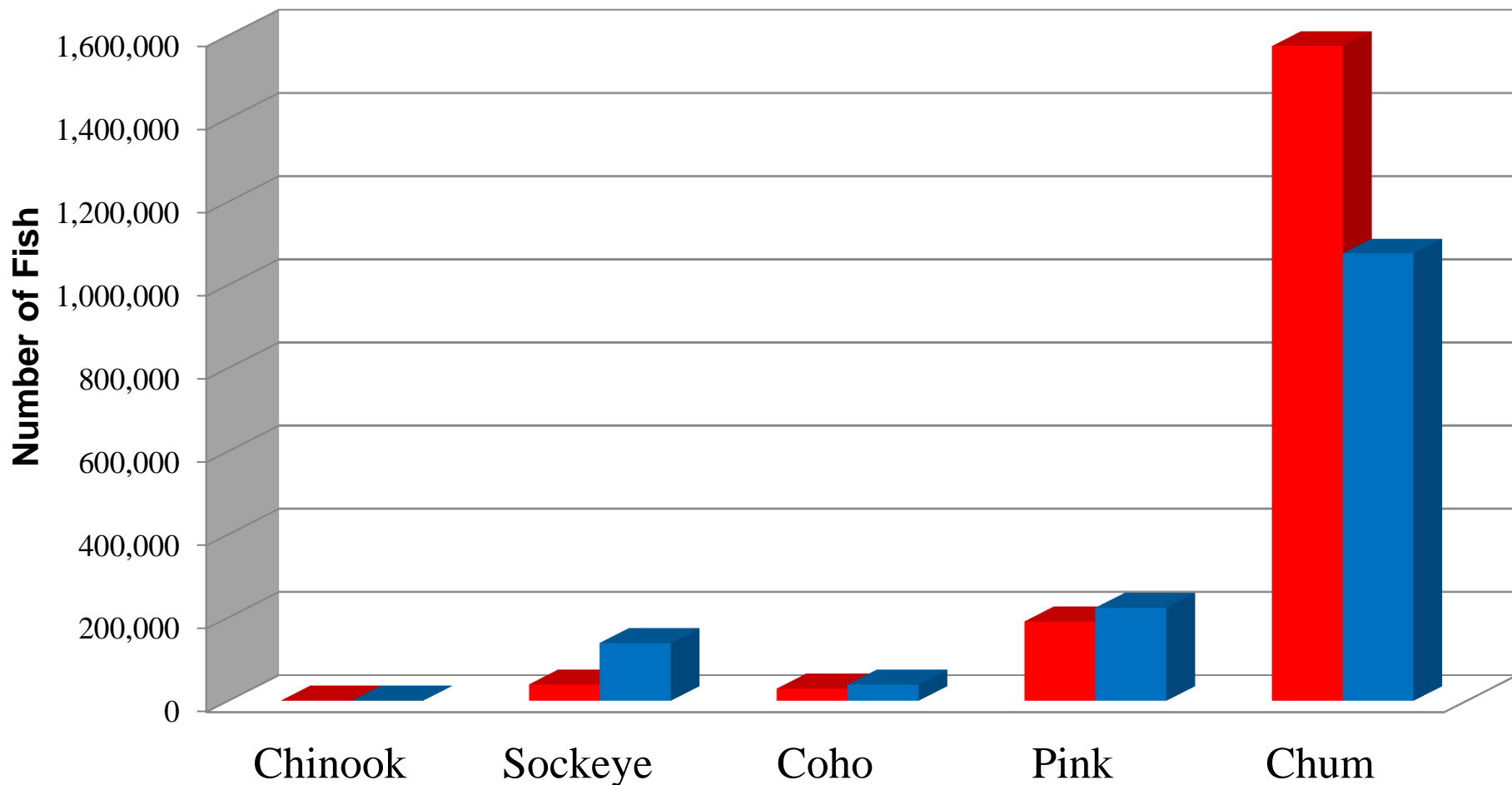
-  115-10
-  115-11
-  115-20
-  115-31
-  115-32
-  115-33
-  115-34
-  115-35



## 2017 District 15 Commercial Drift Gillnet Effort and Harvest

	Stat. Week	Days Open	Boats	Boat Days	Chinook	Sockeye	Coho	Pink	Chum
Summer Management	25	2	126	252	177	1,358	3	100	78,564
	26	2(2)	169	676	357	2,623	32	3,791	350,356
	27	4	169	676	332	1,743	123	28,655	498,579
	28	4	152	608	140	759	122	18,807	219,518
	29	2	106	212	87	6,077	68	42,823	194,024
	30	2(1)	93	279	66	5,834	219	30,998	96,496
	31	2	69	138	24	5,590	179	29,312	45,341
	32	2	67	134	10	5,772	186	17,492	23,996
	33	2	56	112	0	2,171	311	3,579	5,630
	Fall Management	34	1(1)	51	102	4	1,985	136	2,219
35		3	55	165	2	4,034	1,746	12,673	7,767
36		3	54	162	5	812	2,725	748	14,049
37		3	76	228	1	767	8,278	52	15,667
38		2	63	126	0	164	7,870	2	12,942
39		2	56	112	0	24	5,481	0	6,541
40		2	38	76	0	3	2,311	0	2,468
41				Not Open					
Fishery Total:		42	218	4,058	1,205	39,716	29,790	191,251	1,575,039
2007-2016 Average:		52	198	4,839	1,073	139,371	39,454	224,018	1,076,203
2017 % of Average:		81%	110%	84%	112%	28%	76%	85%	146%

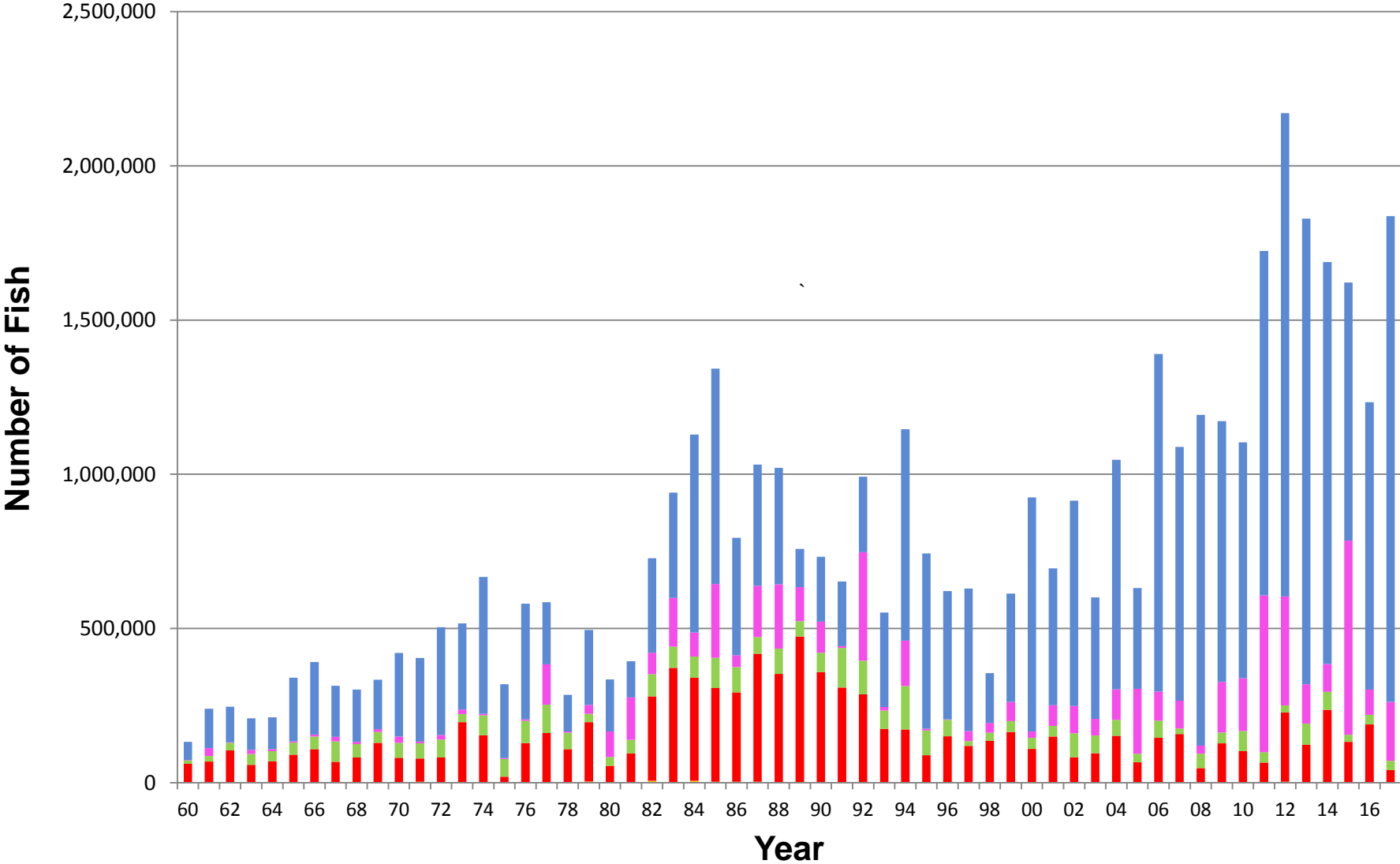
# D-15 Drift Gillnet Harvest, 2017 vs. Previous 10-year Average



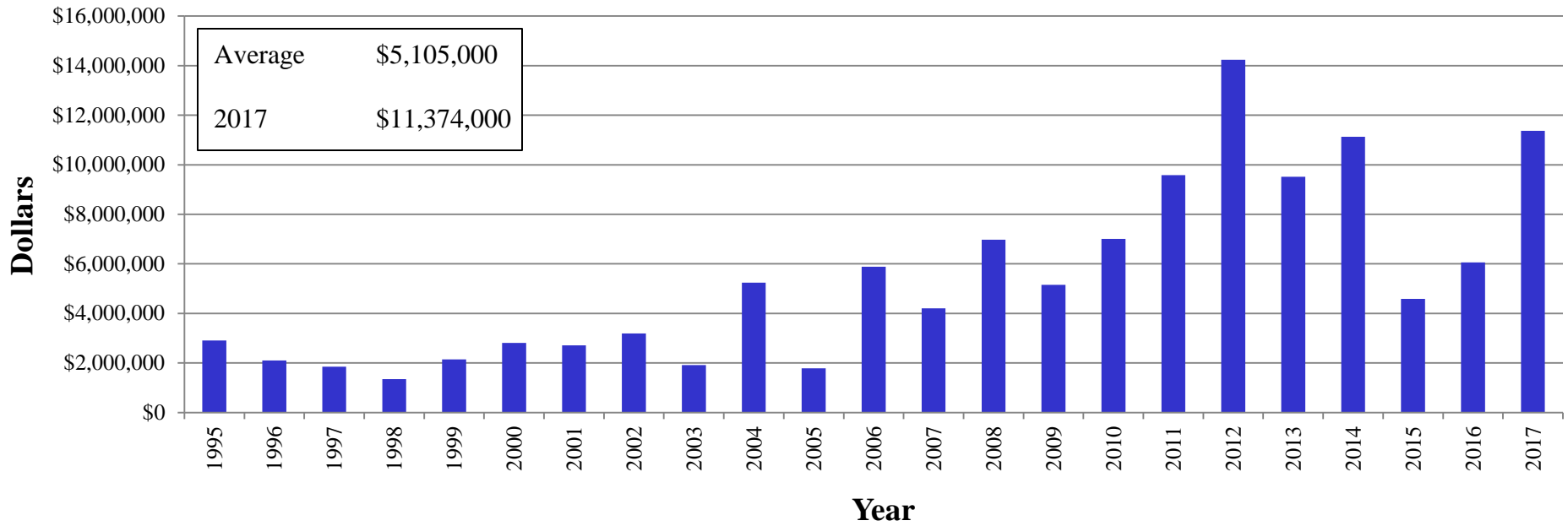
<span style="color: red;">■</span> 2017	1,205	39,716	29,790	191,251	1,575,039
<span style="color: blue;">■</span> Average	1,073	139,371	39,454	224,018	1,076,203

# Commercial Harvests of Pacific Salmon in District 15 1960-2017

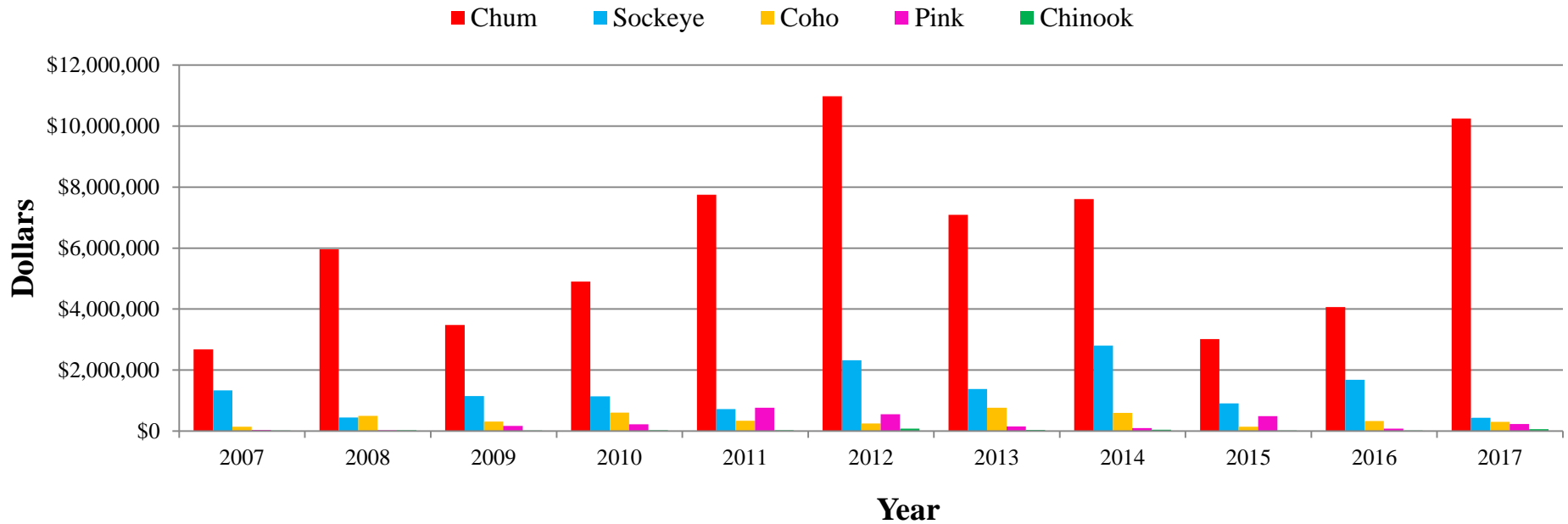
Chinook Sockeye Coho Pink Chum



## Lynn Canal Drift Gillnet Salmon Fishery Value, 1995-2017



## Lynn Canal Drift Gillnet Fishery Value by Species, 2007-2017



# District 15 Chinook Conservation Actions

The 2017 preseason Inriver forecast was 694 large Chilkat River Chinook salmon.

Goal is 1,850 — 3600 large Chinook

## Conservation measures implemented in District 15 fisheries in 2017

- **Gillnet**

- Section 15A

- Western half of 15A closed in 1<sup>st</sup> through 5<sup>th</sup> week (SW 25-29)
- Six inch maximum mesh restriction in 1<sup>st</sup> through 3<sup>rd</sup> week (SW 25-27)
- Night closures between 10:00pm and 4:00am in 1<sup>st</sup> through 3<sup>rd</sup> week (SW 25-27)

- Section 15C

- Limit time and area open to two days per week south of the latitude of Pt. Bridget with any extensions limited to the “postage stamp” in 1<sup>st</sup> and 2<sup>nd</sup> weeks (SW 25-26)
- Six inch maximum mesh restriction in 1<sup>st</sup> and 2<sup>nd</sup> weeks (SW 25-26)

- Boat Harbor THA

- Limit the THA boundaries to one mile off the west shore
- Delay the 7 day a week fishery in the outside waters of the THA until at least the 4<sup>th</sup> week (SW 28), opening this area for a maximum of four days per week.
- Six inch maximum mesh restriction in 1<sup>st</sup> and 2<sup>nd</sup> weeks (SW 25-26)

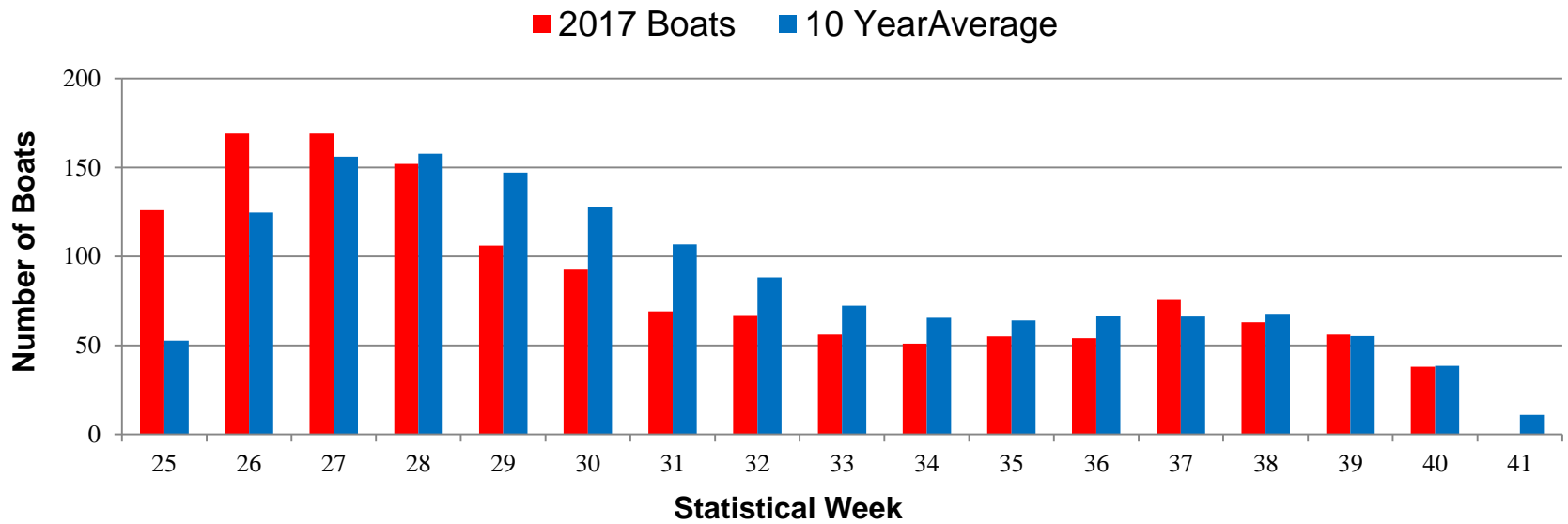
- **Sport**

- Closed northern Chilkat Inlet and north of the ADF&G regulatory marker immediately north of Seduction Point to king salmon sport fishing April 15 – July 15
- In Section 15-A, the waters of Lynn Canal north of the latitude of Sherman Rock were closed to king salmon retention April 15 – December. 31.

- **Subsistence**

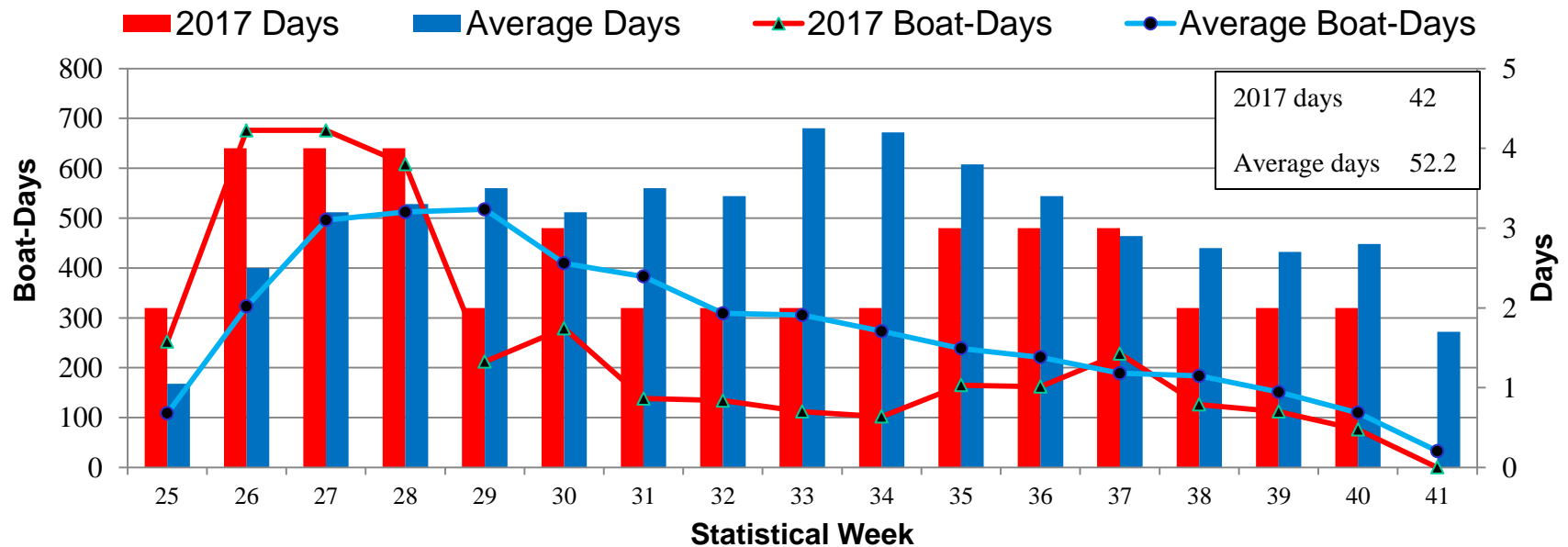
- Closed Chilkat Inlet to subsistence fishing through July 14
- Reduced Chilkat Inlet open area through July 28
- Limit the time allowed to subsistence fish in the Chilkat River to 4 days a week, June 15 and July 31.

## Number of Boats in the D-115 DGN Fishery, 2017



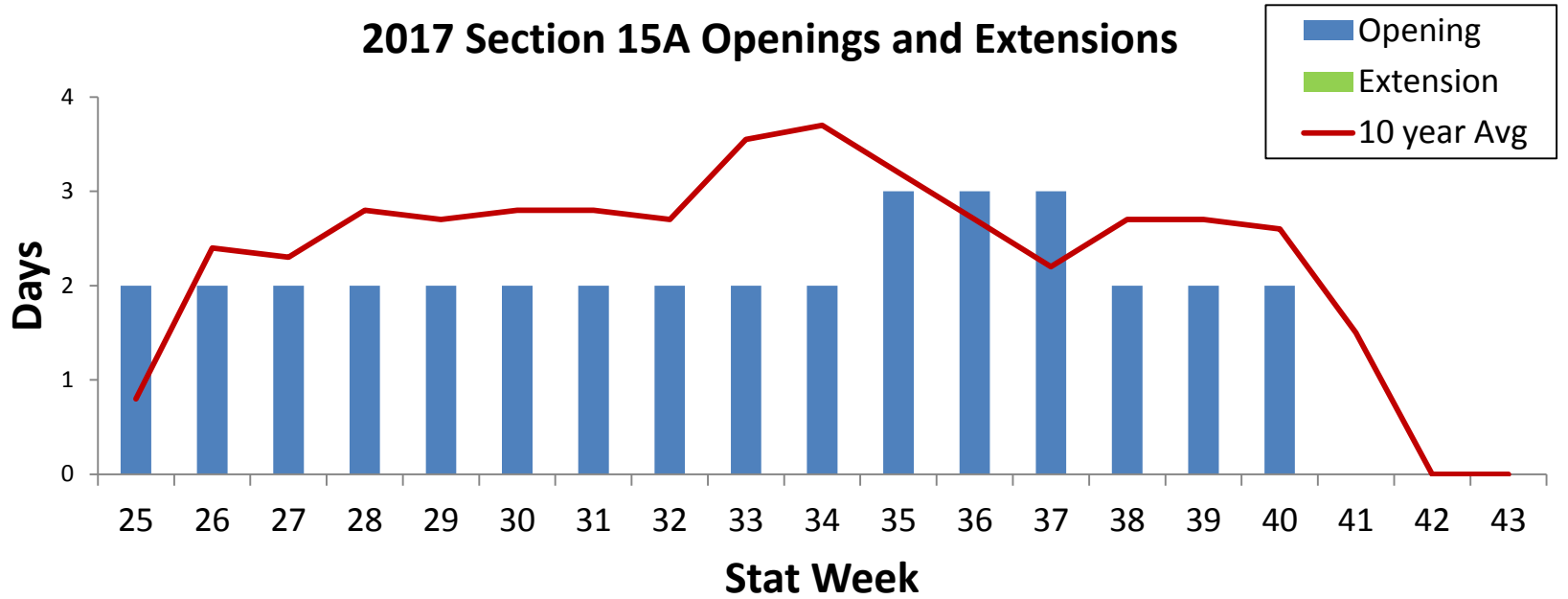
218 unique permits fished D-15 in 2017. 1980-2016 average is 212. 2006-2016 average is 204.

## Days and Boat-days in the D-115 DGN Fishery, 2017

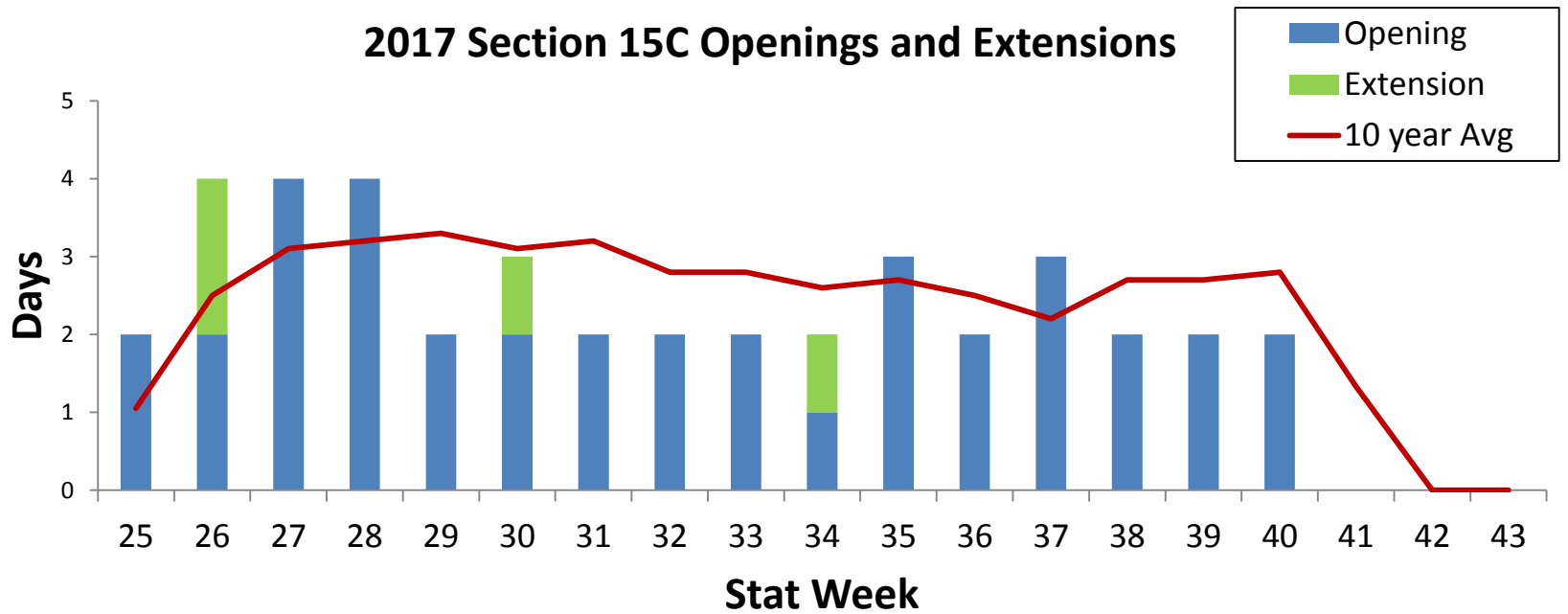




### 2017 Section 15A Openings and Extensions

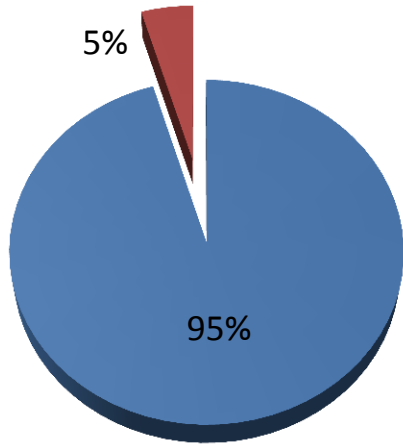


### 2017 Section 15C Openings and Extensions

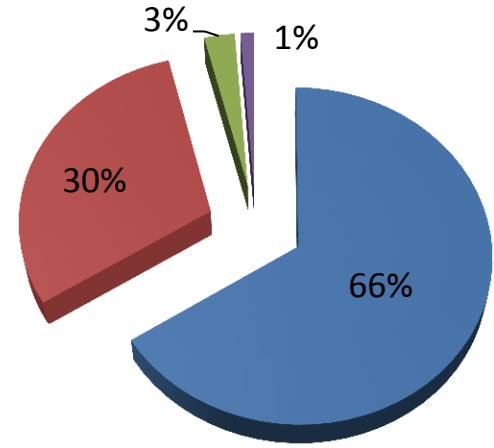


# 2017 District 15 Gillnet Harvest by Sub-District

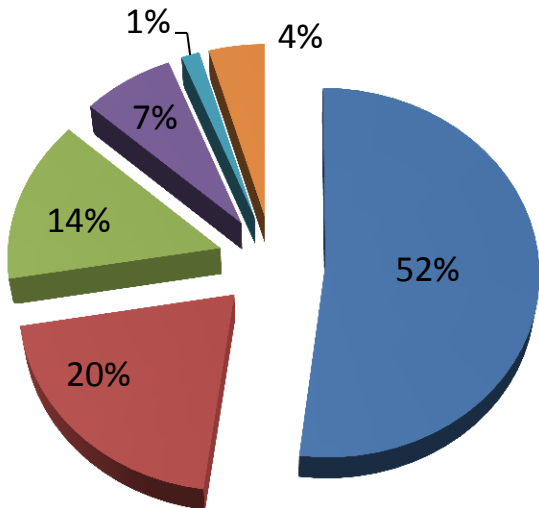
## Chinook



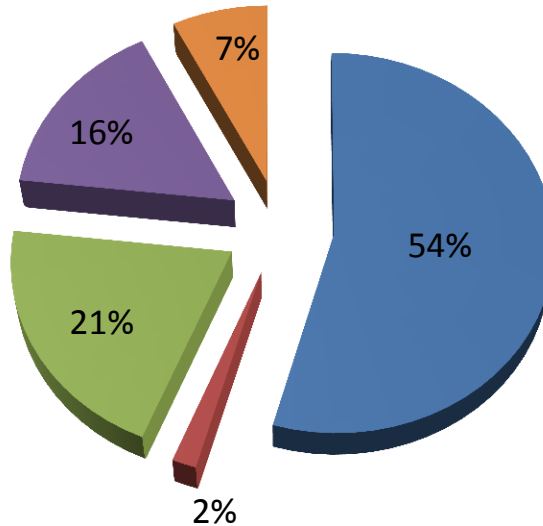
## Chum



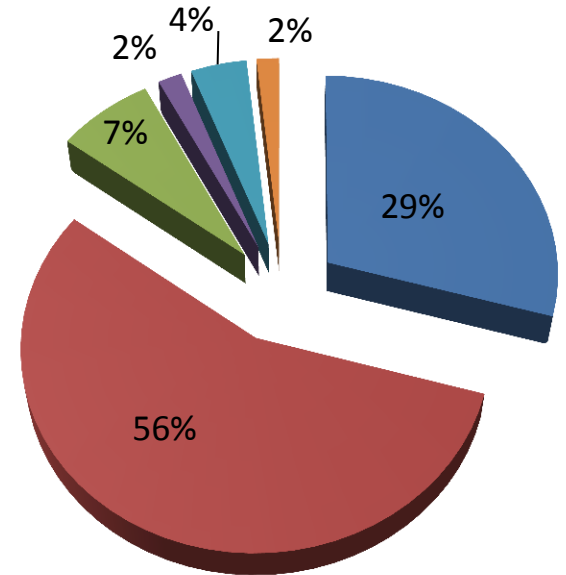
## Sockeye



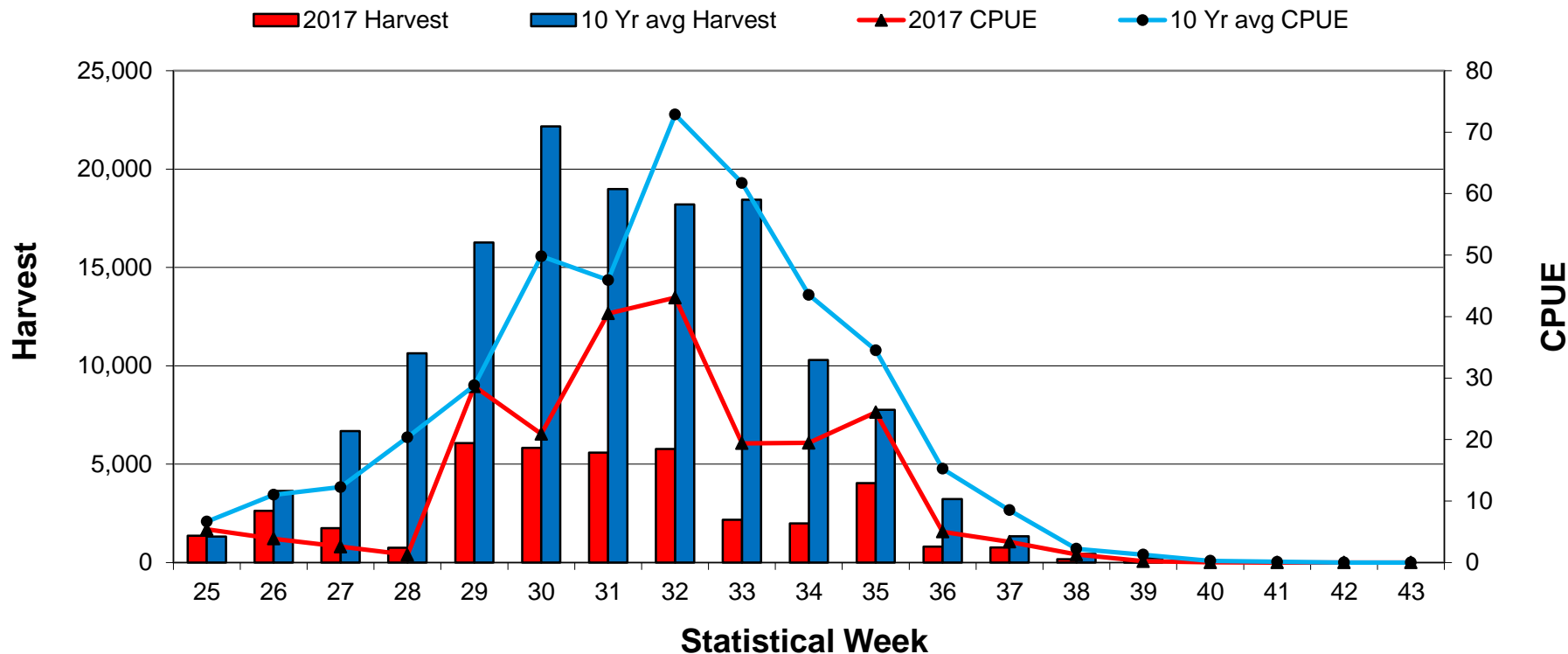
## Coho



## Pink



## 2017 District 15 Weekly Sockeye Harvest and CPUE



### 2017 District 15 Sockeye Harvest (based on Genetic Stock Identification)

Total sockeye = 39,716

28% of the 10-year average

Chilkoot Lake = 1,986 (5% of Total)

3% of the 10-year average

Chilkat Lake = 5,910 (15% of Total)

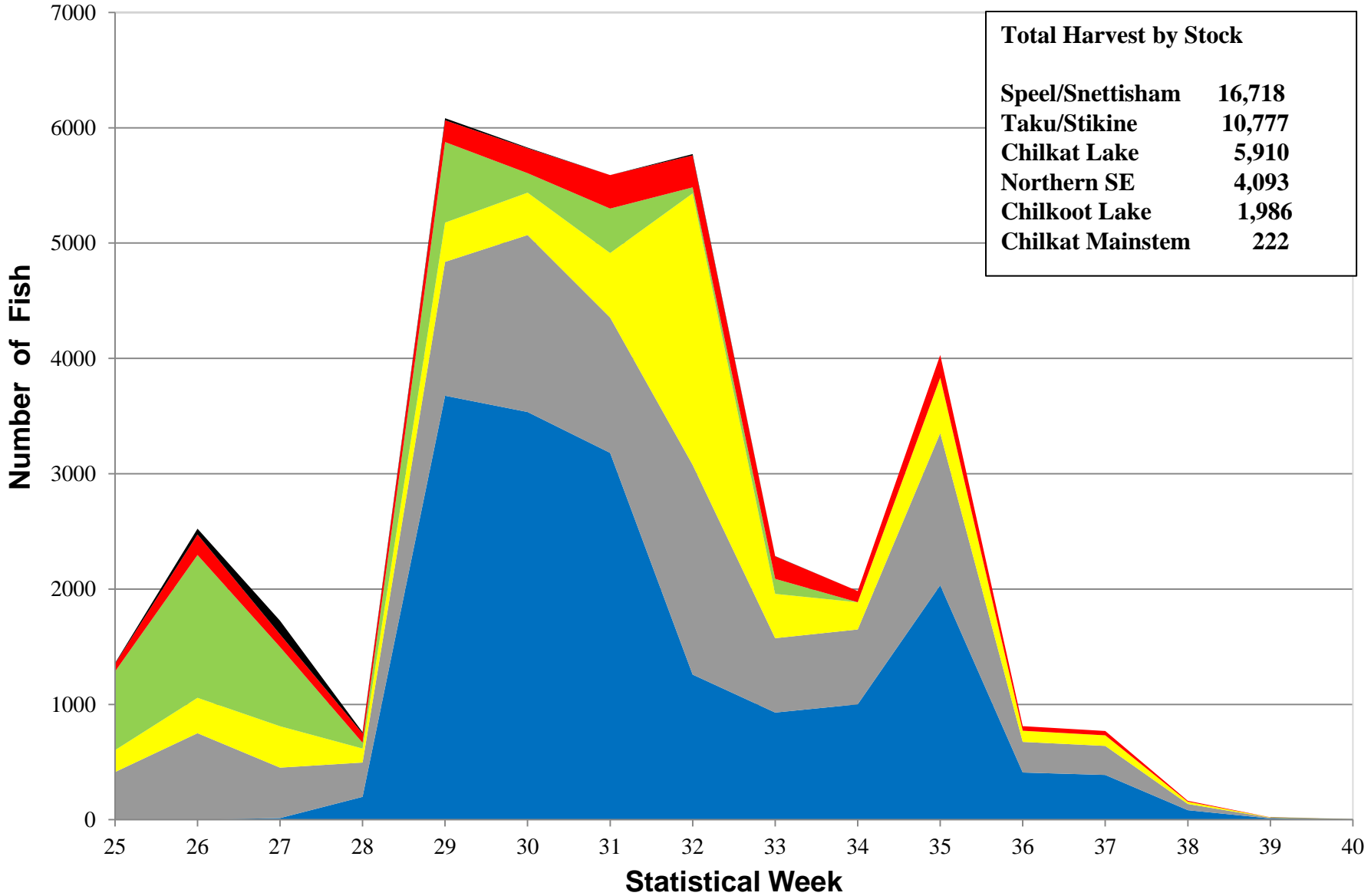
13% of the 10-year average

Others = 31,820 (80% of Total)

113% the 10-year average

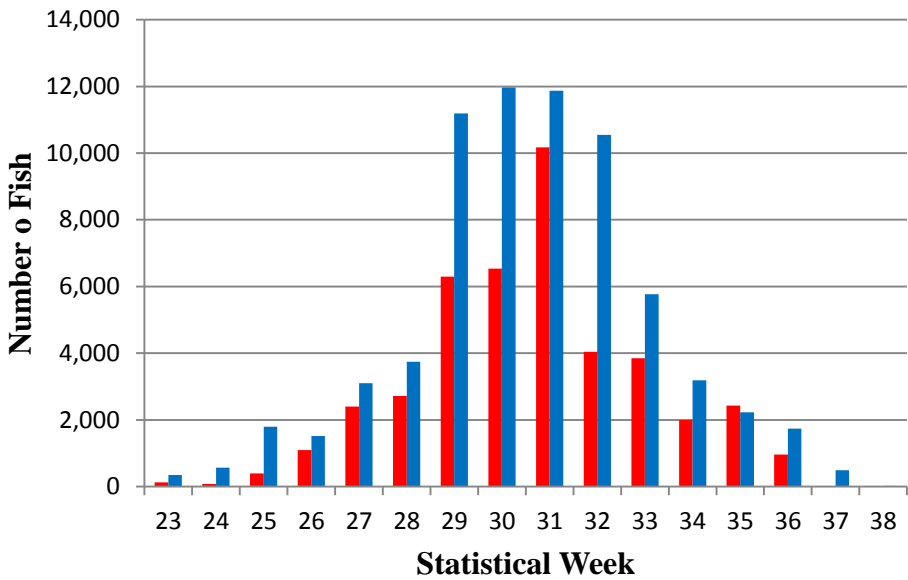
# 2017 District 15 Sockeye Harvest by Stock (Genetic Stock Identification)

■ Speel/Snett   
 ■ Taku/Stikine   
 ■ Chilkat Lake   
 ■ NSEAK   
 ■ Chilkoot   
 ■ Chilkat Main



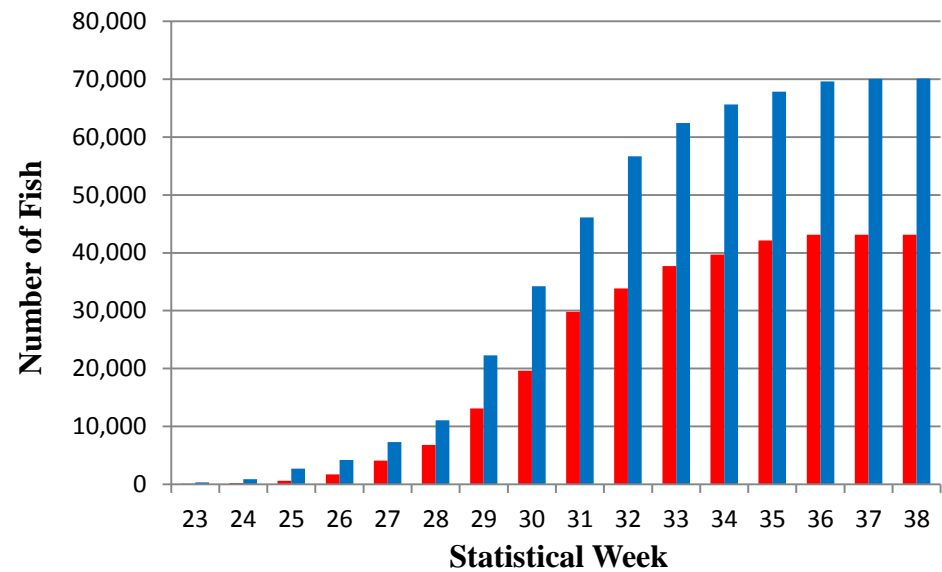
### Chilkoot Lake Sockeye Weir Counts

■ 2017      ■ 07-16 Average



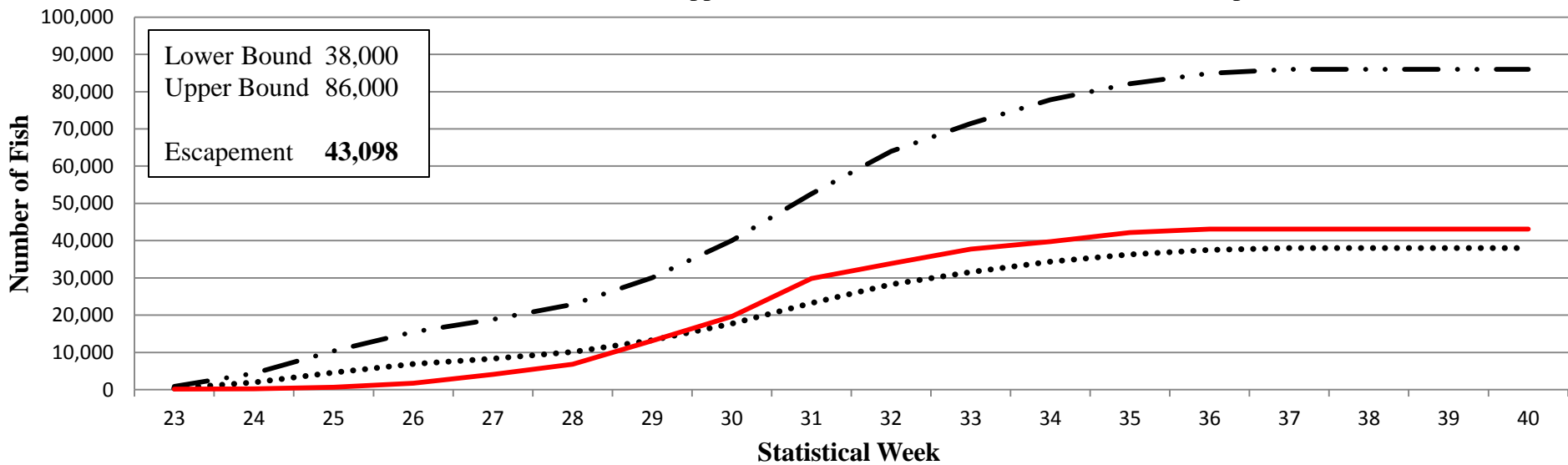
### Cumulative Chilkoot Lake Sockeye Weir Counts

■ 2017      ■ 07-16 Average



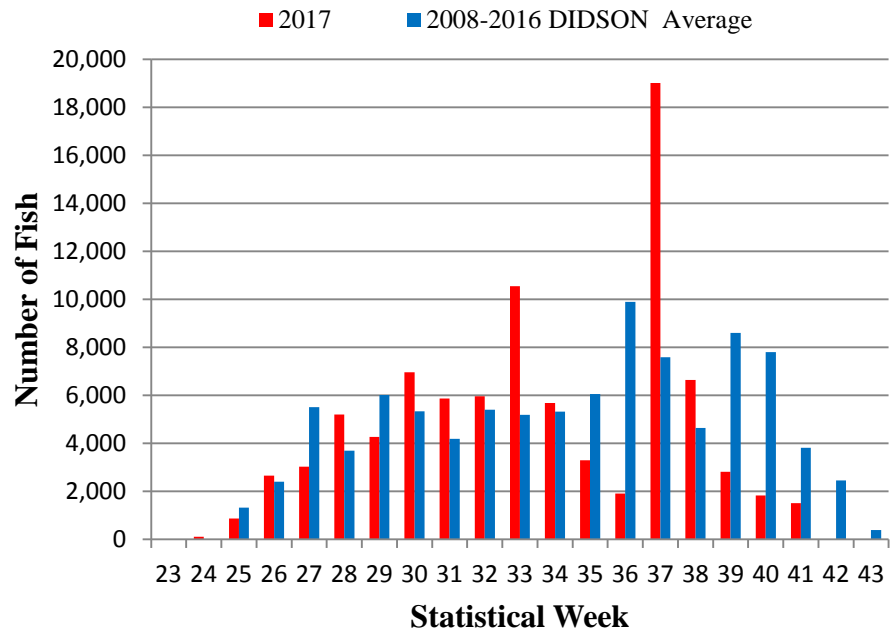
### 2017 Chilkoot Weir Counts Compared to Escapement Goals

..... Lower Bound Goal      — Upper Bound Goal      — 2017 Cumulative Escapement

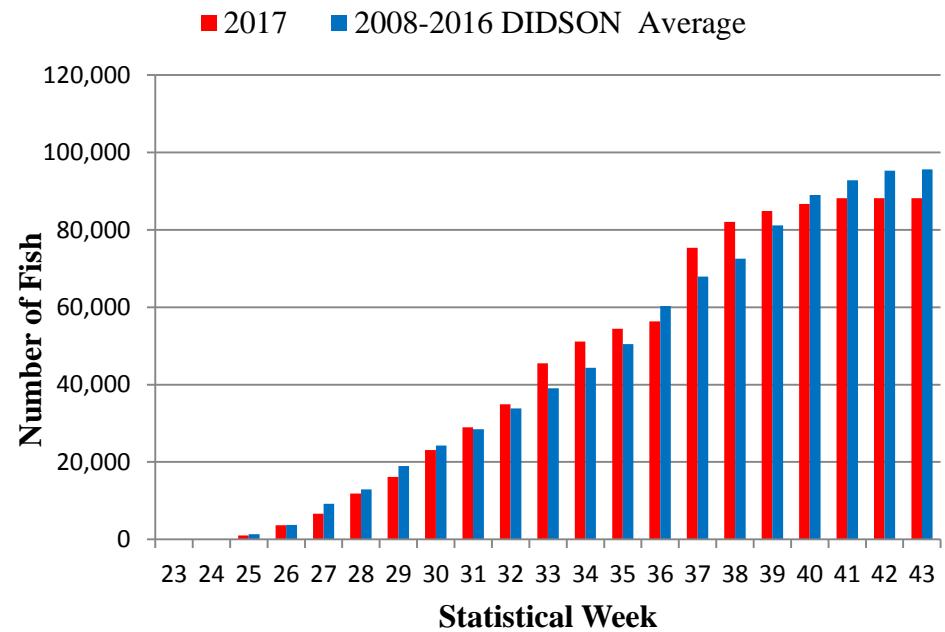


Lower Bound	38,000
Upper Bound	86,000
Escapement	<b>43,098</b>

### Chilkat Lake DIDSON Counts

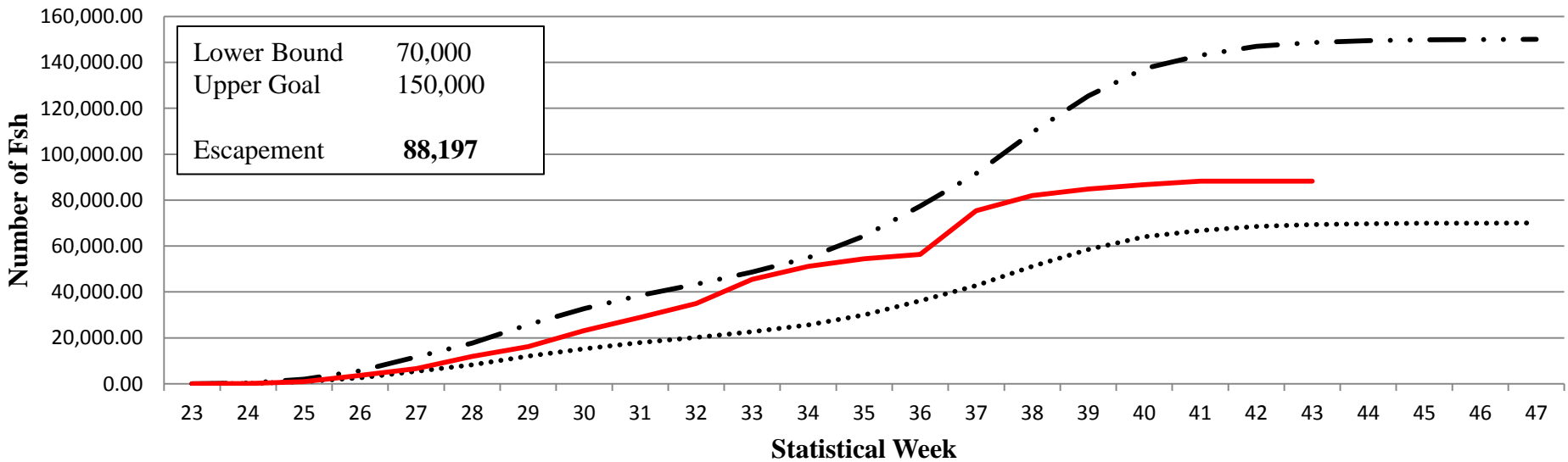


### Chilkat Lake DIDSON Cumulative Counts

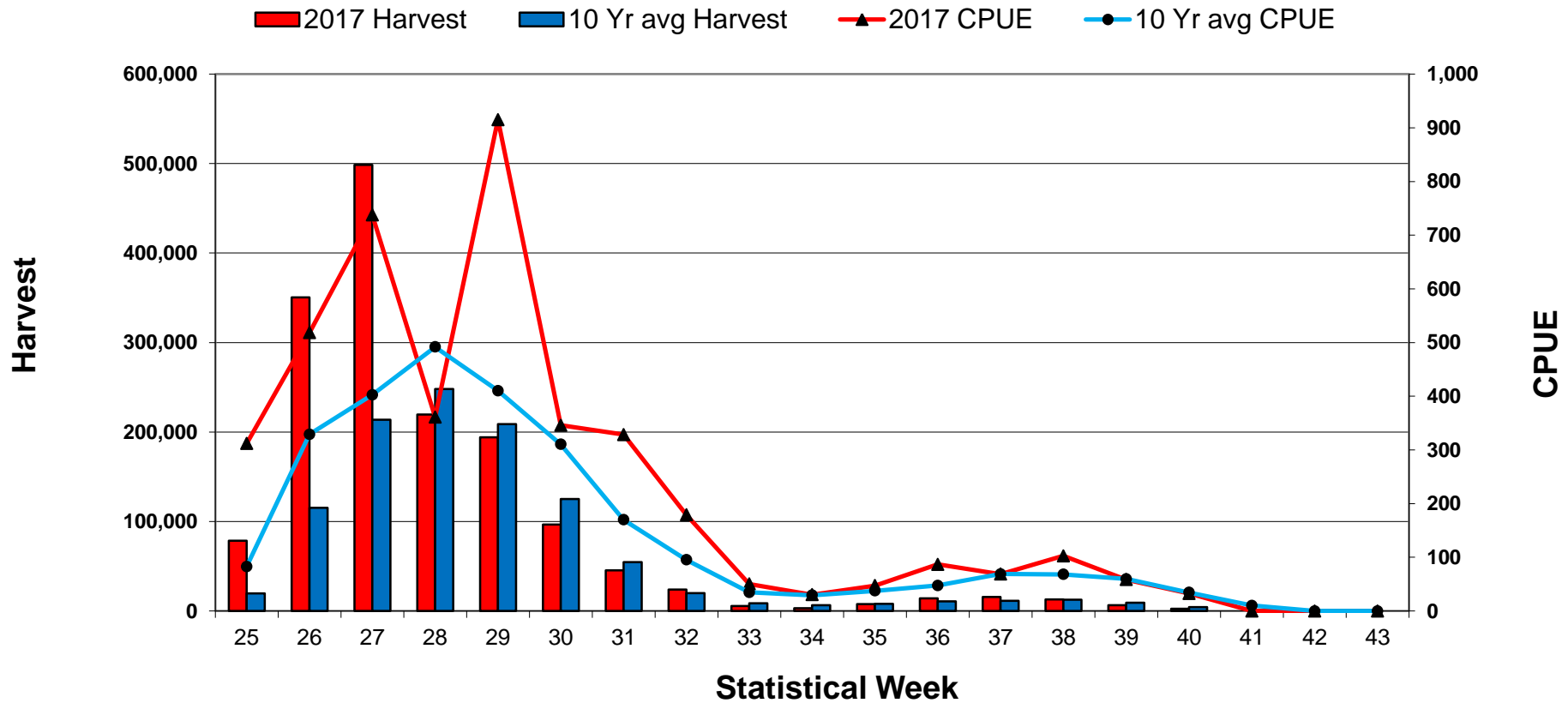


### 2017 Chilkat Weir DIDSON Count and Escapement Goals

..... Lower Bound Goal    —•— Upper Bound Goal    — 2017



## 2017 District 15 Weekly Chum Harvest and CPUE



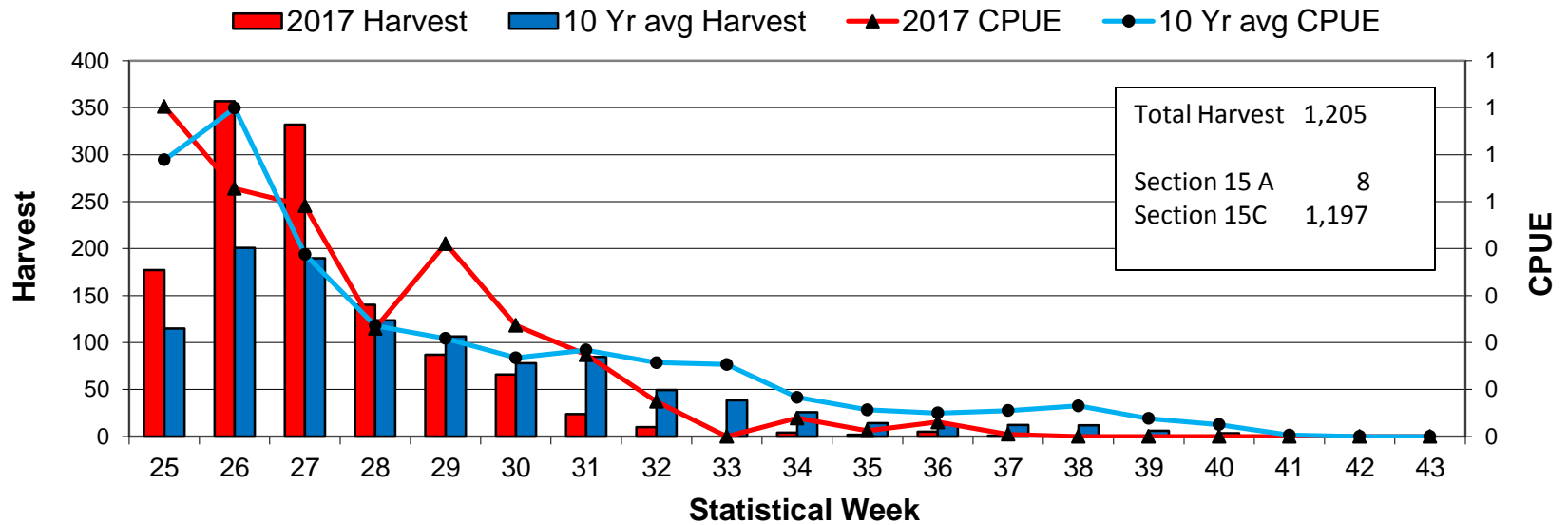
### 2017 District 15 Chum Harvest

Summer Chum Harvest = 1,512,504 (1.4 times the 10-year average, 1.5 times the 2016 harvest)

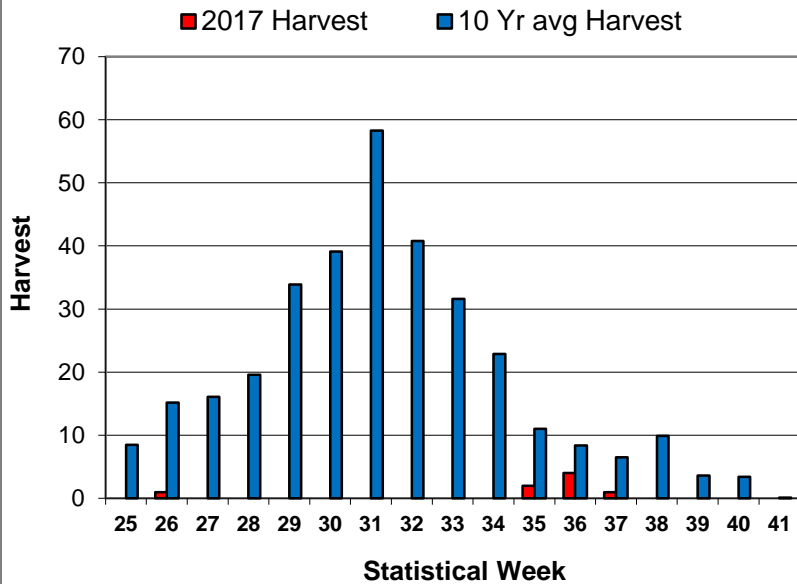
Fall Chum Harvest = 62,535 (99% of the 10-year average)

Total Chum Harvest = 1,575,039 (1.5 times the 10-year average)

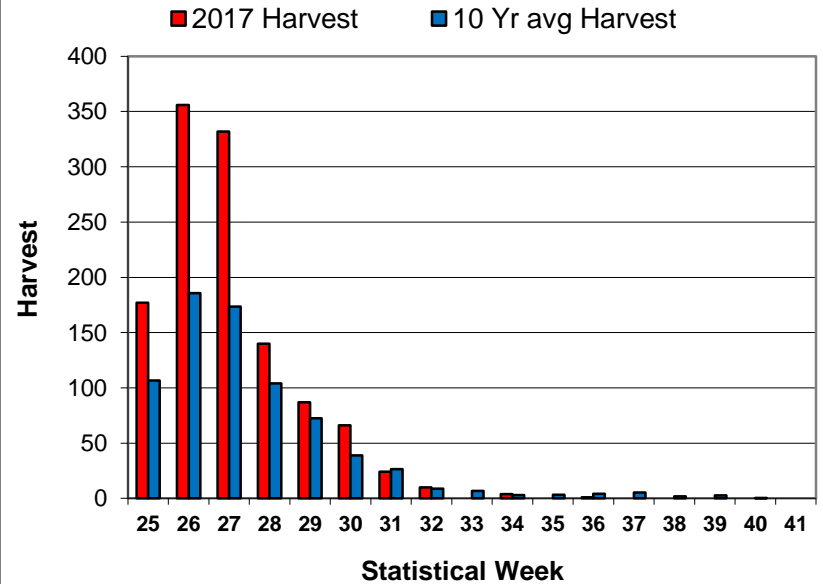
## 2017 District 15 Weekly Chinook Harvest and CPUE



### 2017 Section 15A Weekly Chinook Harvest

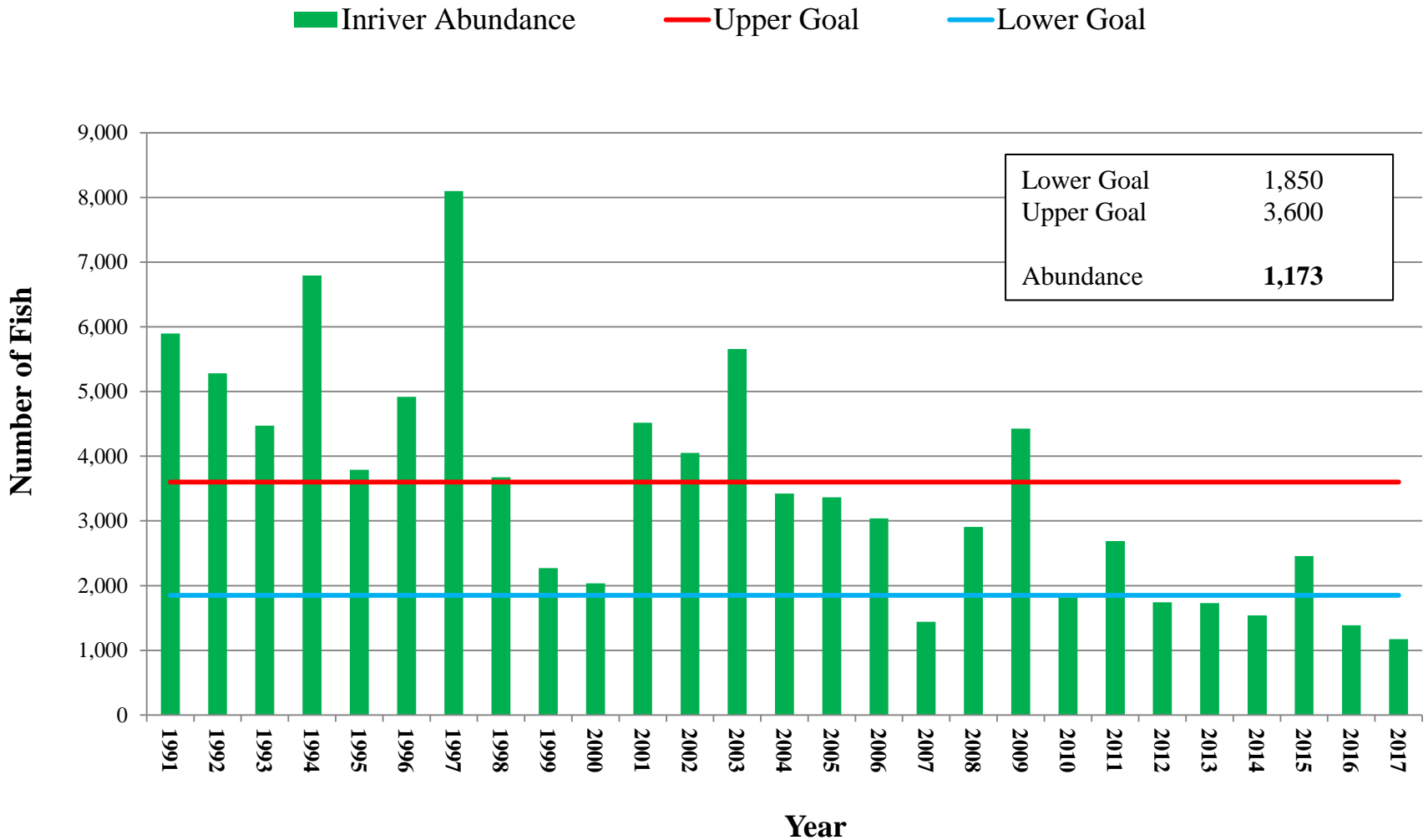


### 2017 Section 15C Weekly Chinook Harvest





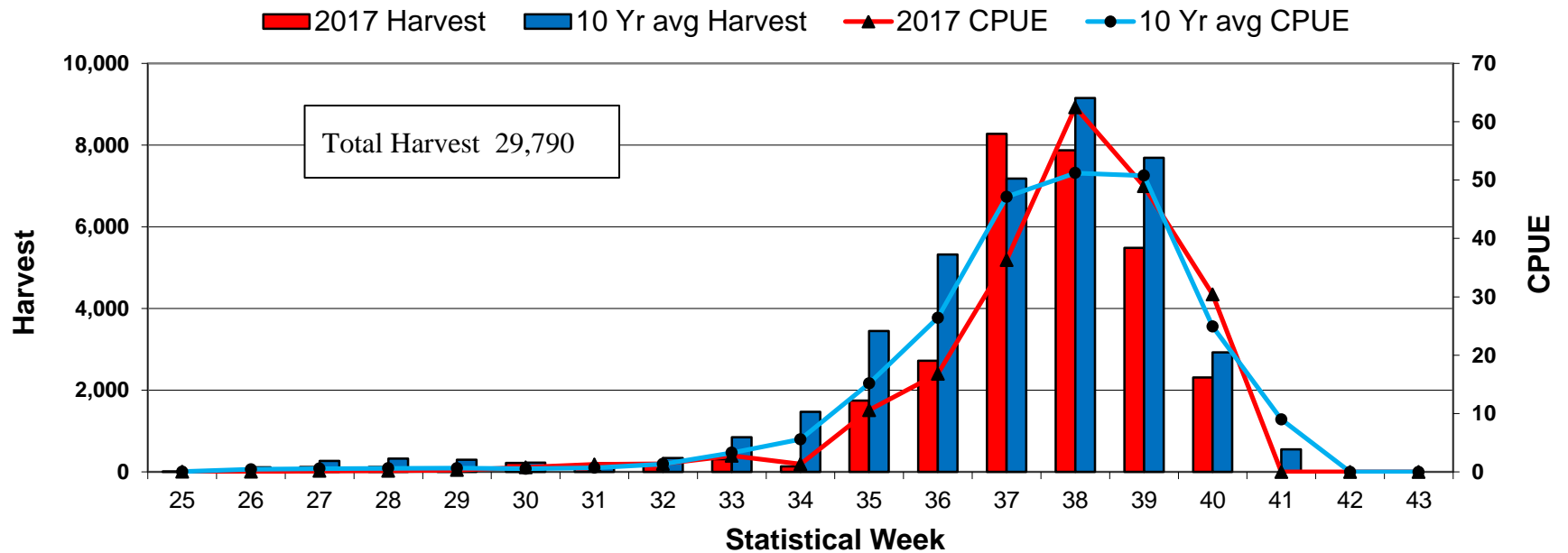
## Chilkat River Chinook Inriver Abundance (age 1.3+), 1991-2017



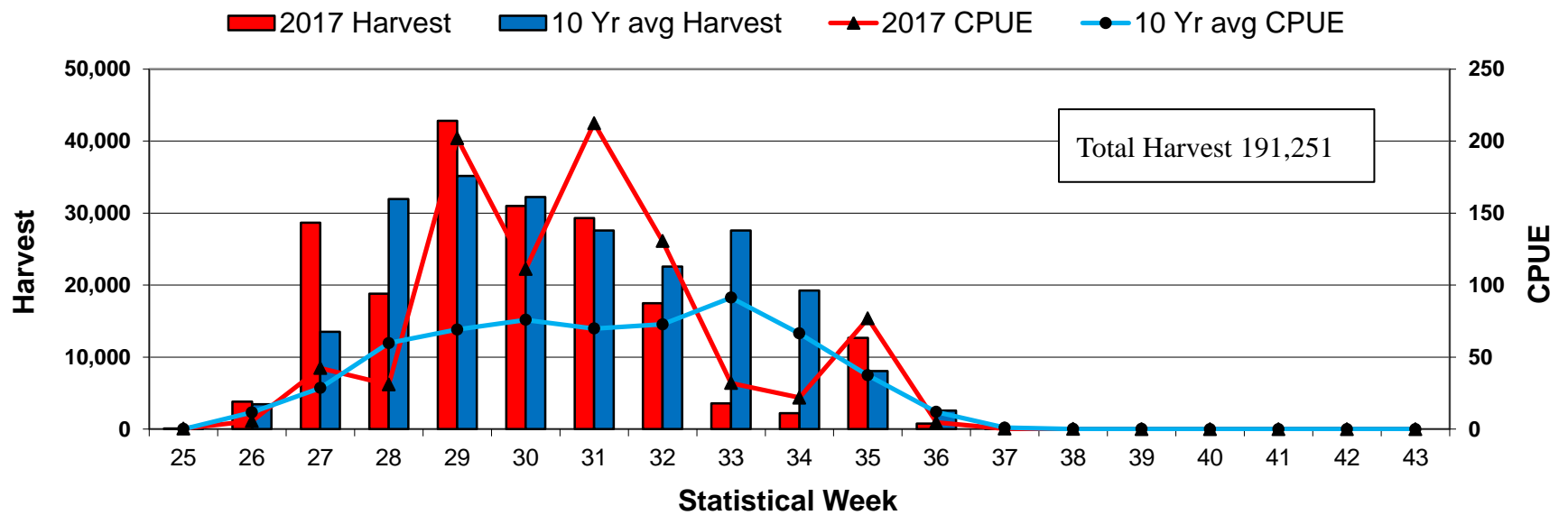
The 2017 inriver forecast was for a return of **634** large Chilkat Chinook salmon.

The 2018 Inriver Abundance forecast for Chilkat Chinook salmon is **928** large (age 1.3+ ) fish.

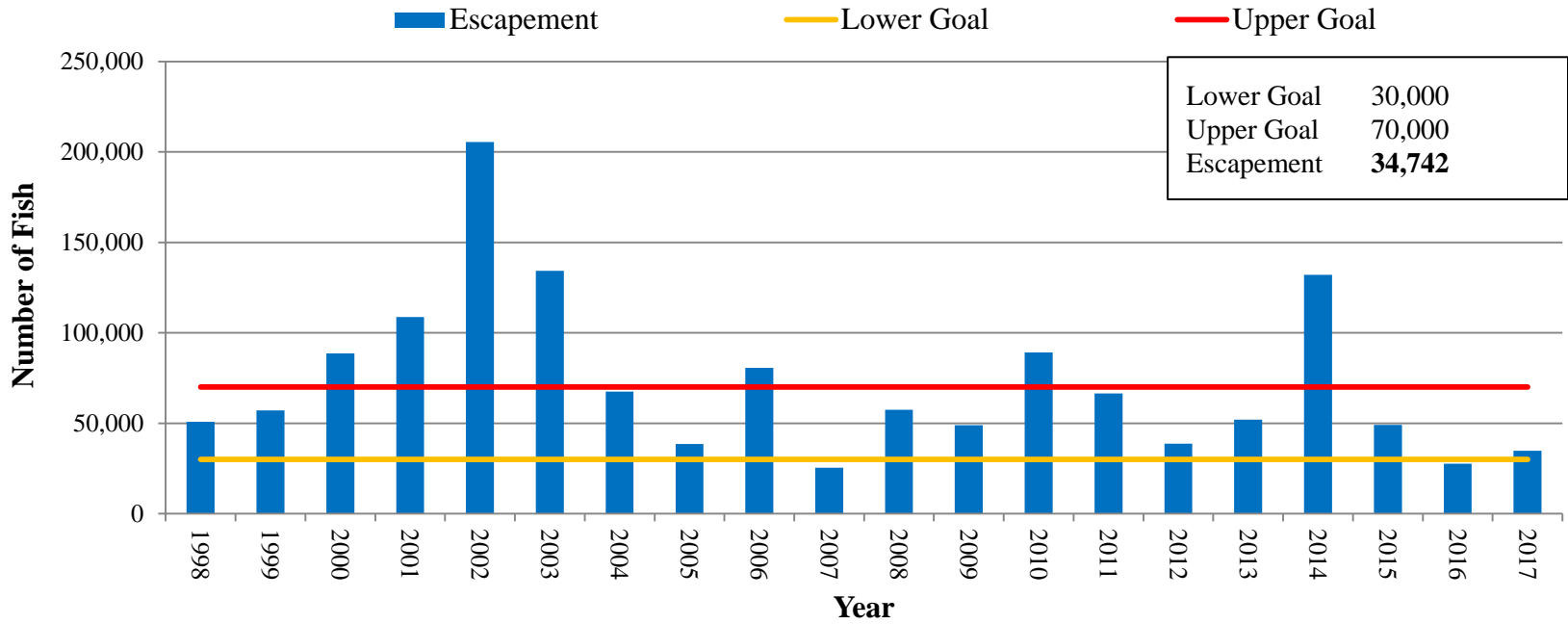
### 2017 District 15 Weekly Coho Harvest and CPUE



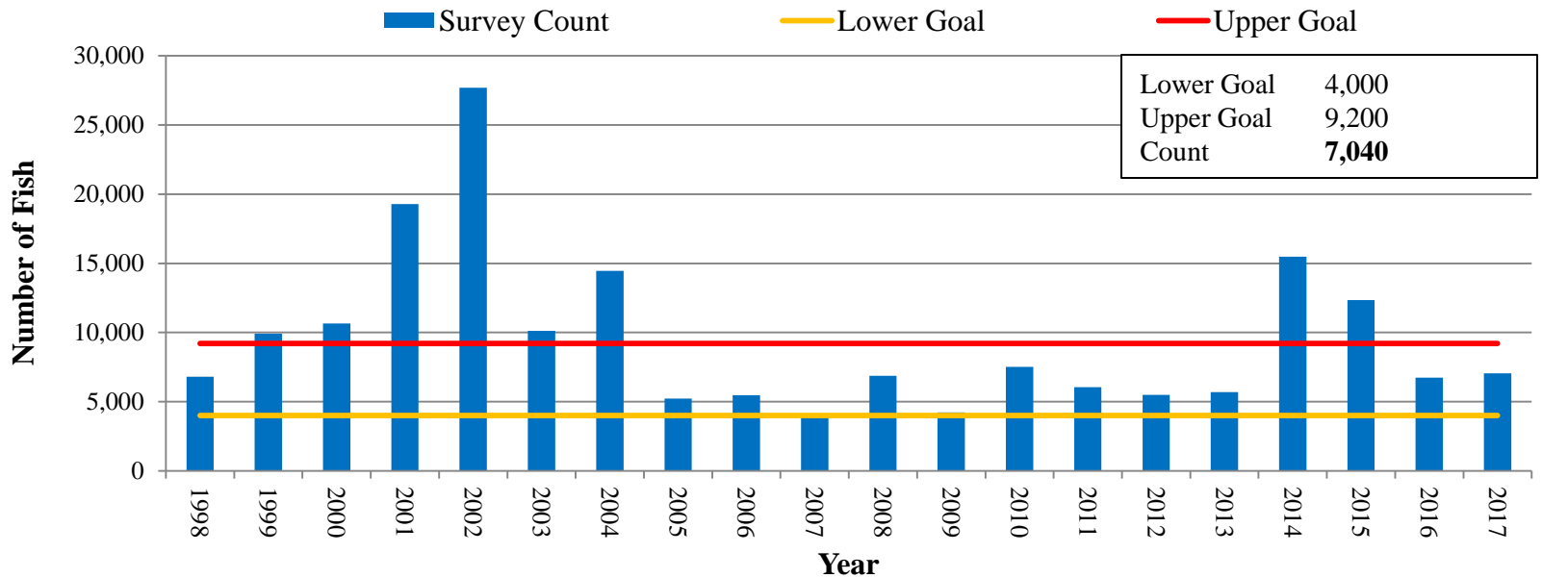
### 2017 District 15 Weekly Pink Harvest and CPUE



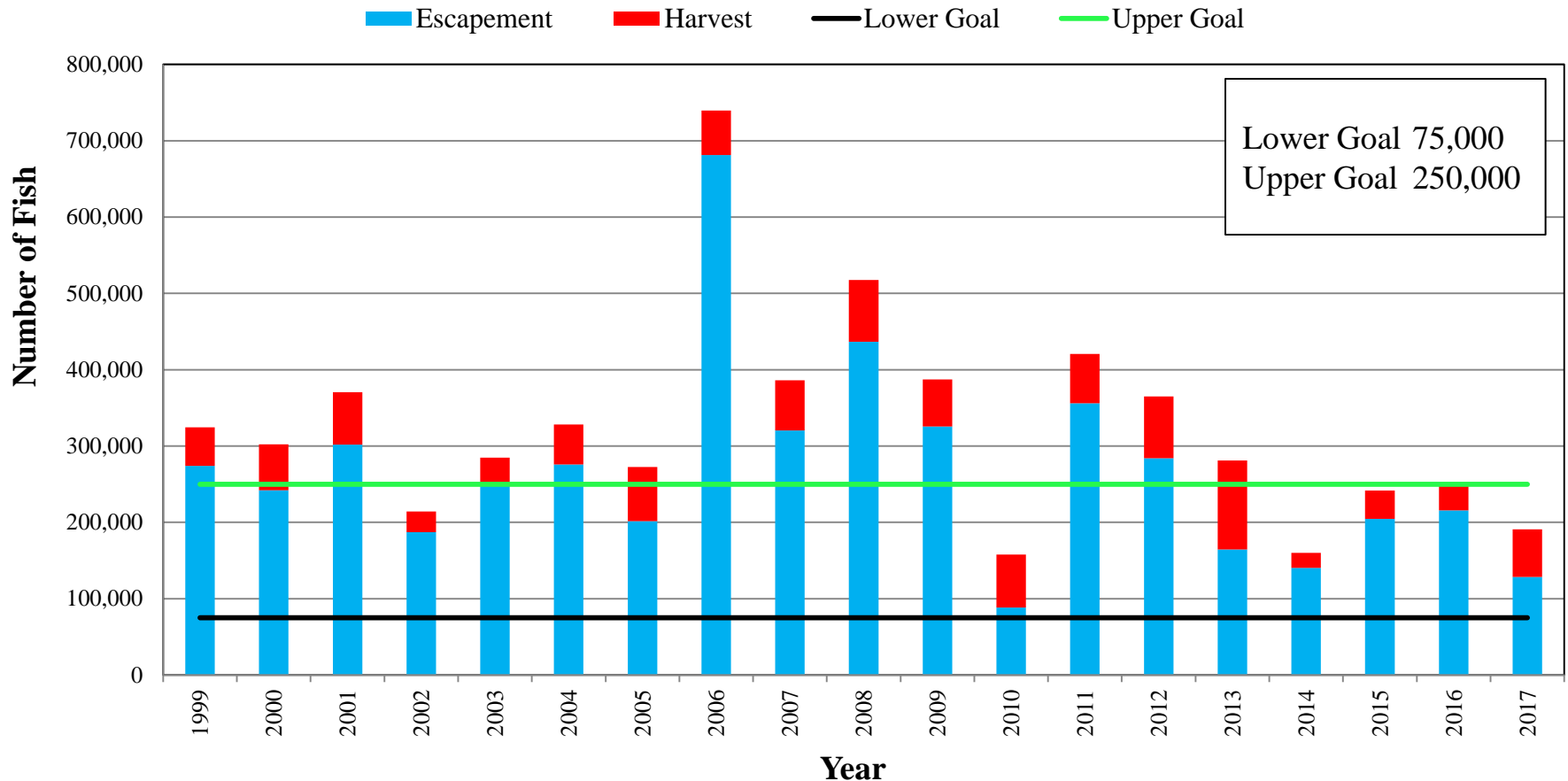
### Chilkat River Coho Salmon Escapement, 1998-2017



### Berners River Coho Salmon Counts, 1998-2017



# Chilkat River Drainage Fall Chum Escapement and Harvest 1999-2017



## Chilkat and Klehini River Chum Salmon

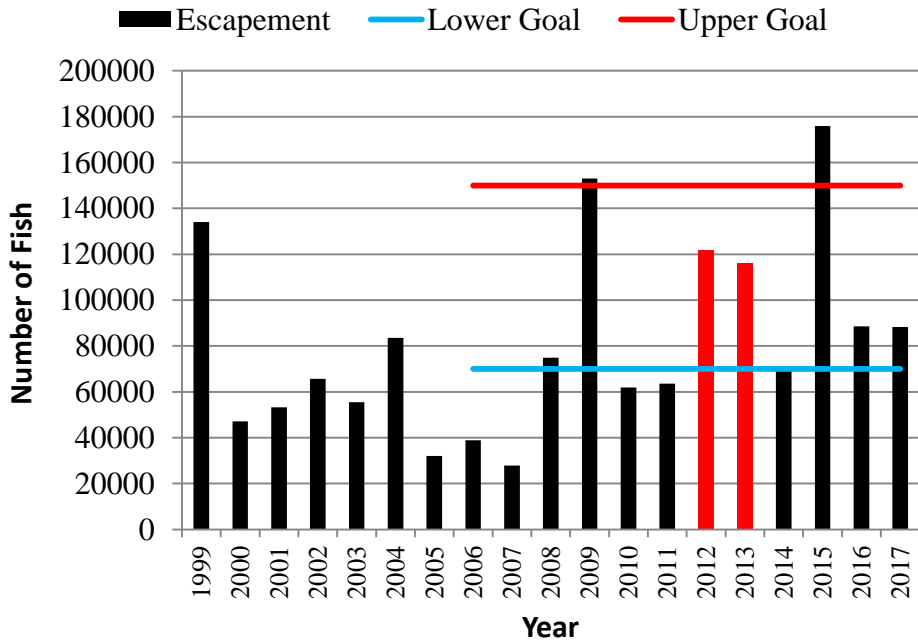
- Below average return to the Klehini River and Chilkat River spawning areas.
- Total 2017 Chum Escapement estimated to be **128,500** fish.

# 2018 Projection

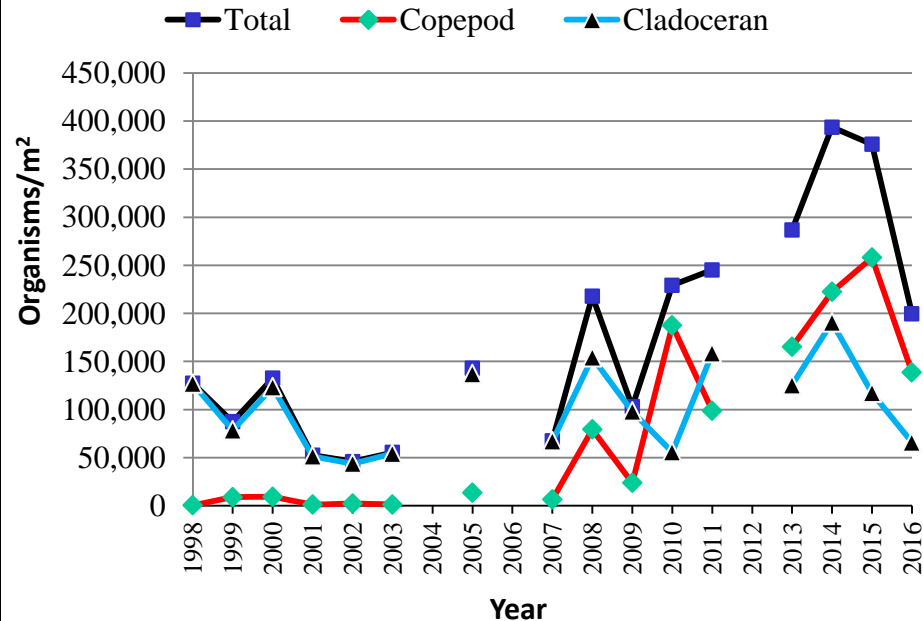
## Chilkat Lake Sockeye – Average Return Strength for 2018

- Parental year escapements were near the midpoint of the goal range in 2012 and 2013 (brood years for 2017 return).
- Total zooplankton levels were well above average of 172,633 organisms/m<sup>2</sup> in Chilkat Lake for rearing fry in 2013 through 2015, the years when sockeye salmon returning in 2018 were rearing in the lake. Age 2.3 fish reared in the lake in 2013 and 2014. Age 2.2 fish reared in 2014 and 2015, and age 1.3 fish reared in 2014.
- The proportion of age-2.2 fish in the 2017 escapement was 9%, well below average (24%). The escapement in the parent year (2012) for this cohort was good (122,000), but the low proportion of the age-2.2 fish could indicate a below average return of age-2.3 fish in 2018. This could be balanced by a stronger return of age 1.3 and age 2.2 fish returning from the 2013 escapement ((116,000).

### Chilkat Lake Escapement , 1999-2017



### Chilkat Lake Total Zooplankton Density 1998-2016

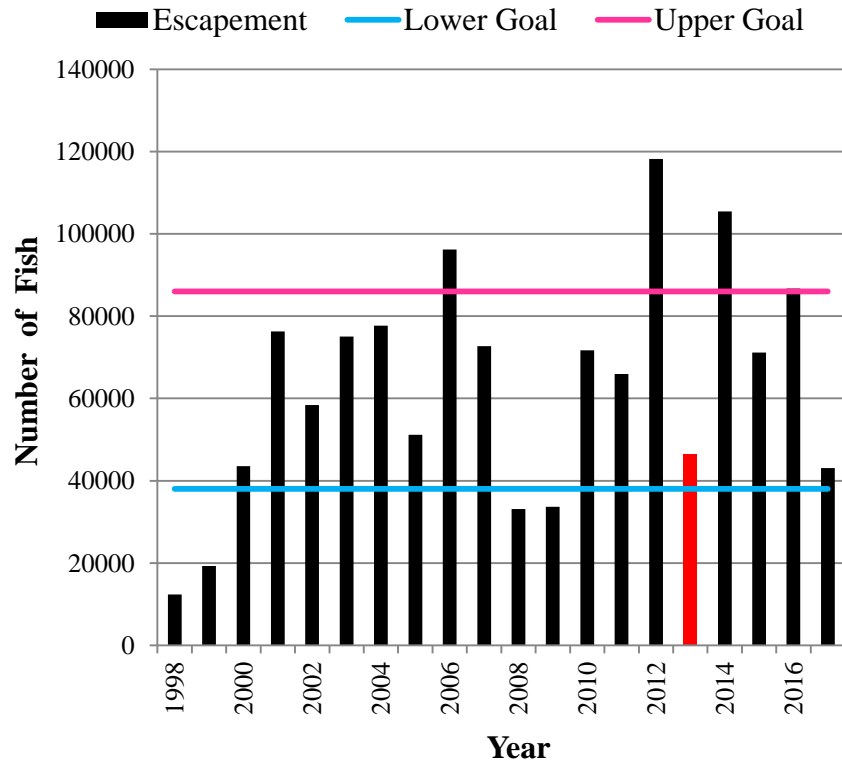


# 2018 Projection

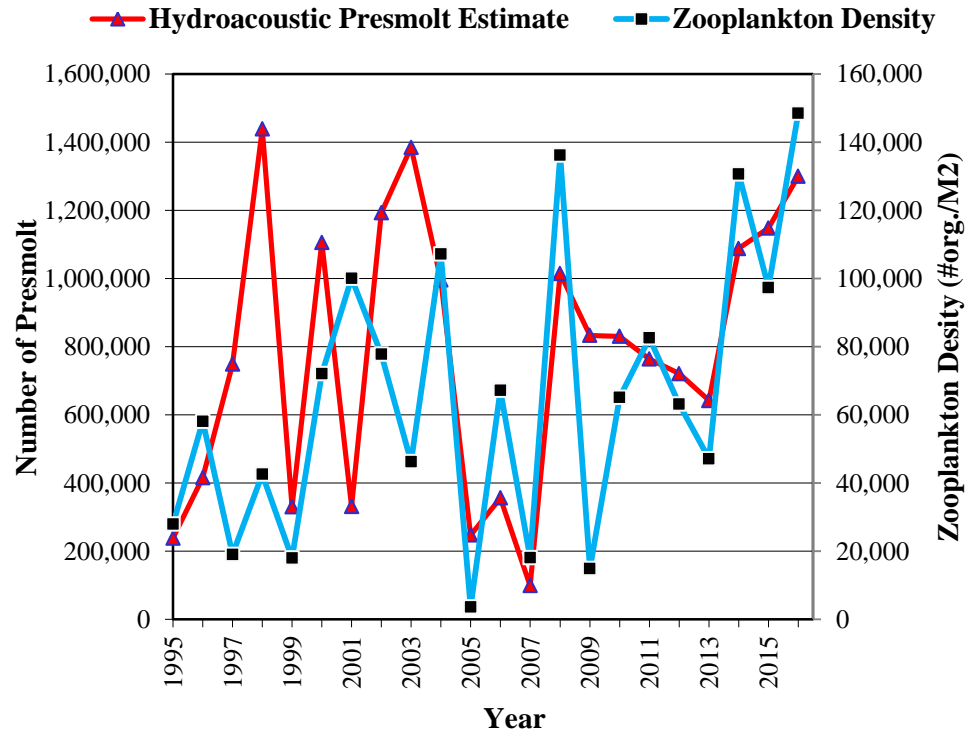
## Chilkoot Lake Sockeye – Average Return Strength for 2018

- An average of 71% of the Chilkoot sockeye are age-1.3 fish, and for the 2018 return these will have spawned in 2013.
- 2013 weir count of 46,329 sockeye was within the goal range of 38,000 - 86,000 fish.
- Lake productivity in 2014 (zooplankton density and rearing smolt density) increased, indicating improved rearing conditions for fry present in the lake. This could result in an increase in the return per spawner for fry rearing in that year.

### Chilkoot Lake Escapement, 1998-2017



### Chilkoot Lake Hydroacoustic Presmolt Estimate and Zooplankton Density, 1995-2016



Questions?

