

# Southeast AK Gillnet Task Force Meeting

## December 7, 2020

### Virtual

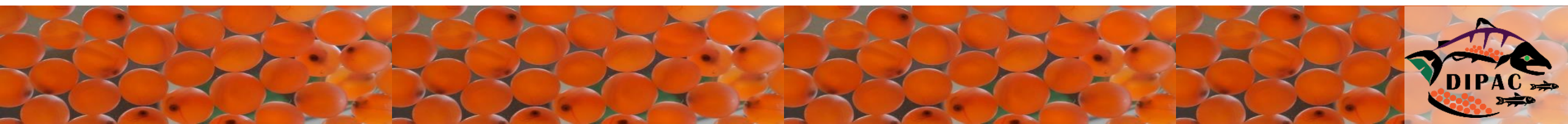
Adam Zaleski

Research Manager

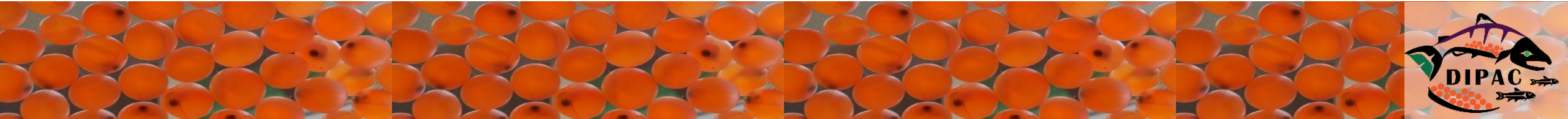
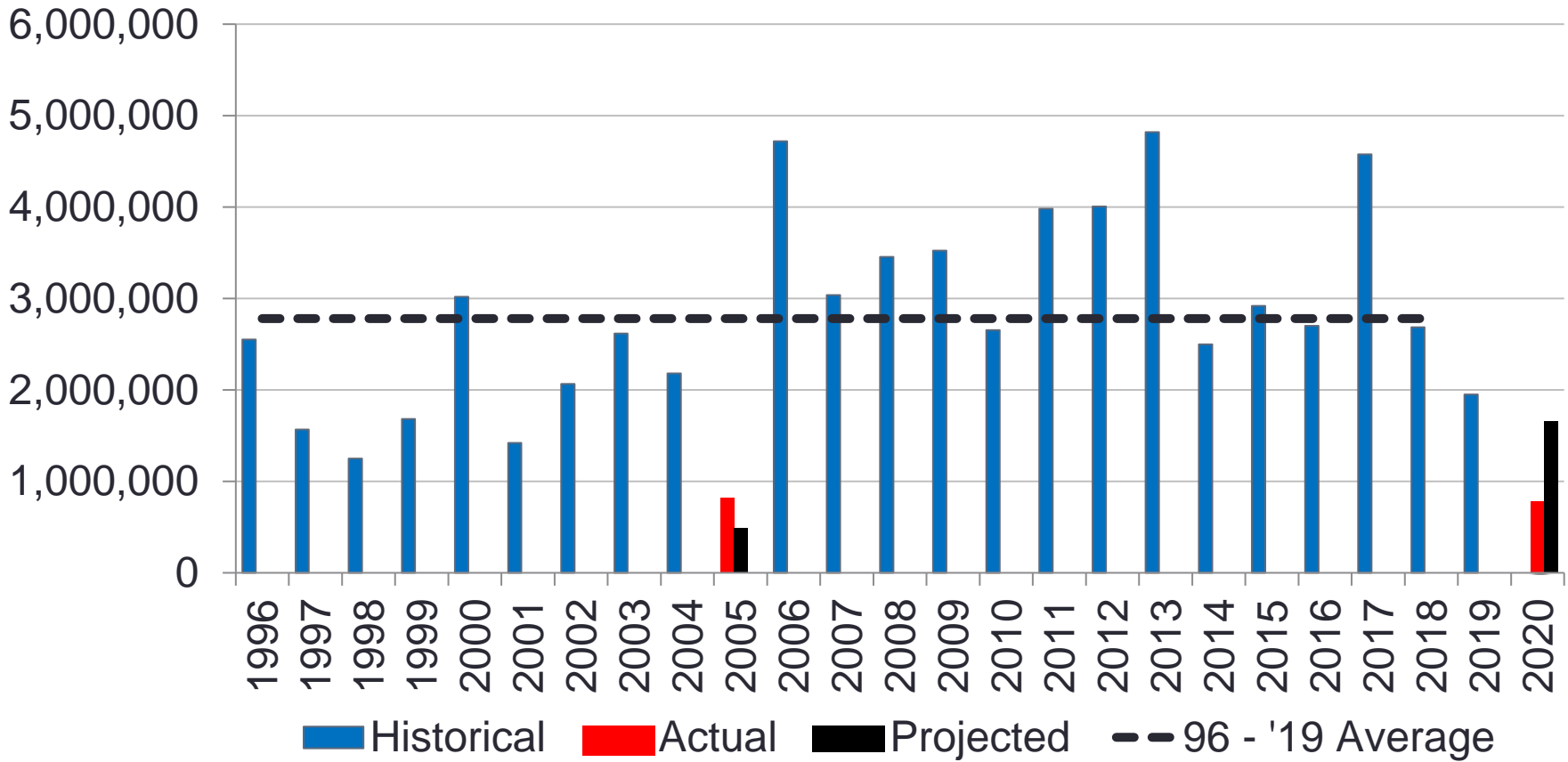


# 2020 Chum Return

	Age-3	Age-4	Age-5	Age-6	Total
Actual:	178,500	508,600	97,200	7,200	791,400
Projected:	52,800	1,212,800	367,600	23,600	1,656,900
% of Projected:	335%	42%	26%	30%	48%

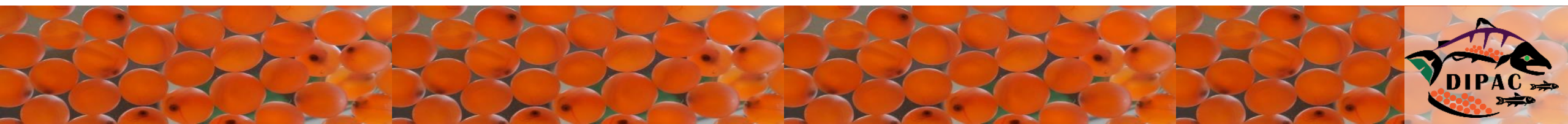
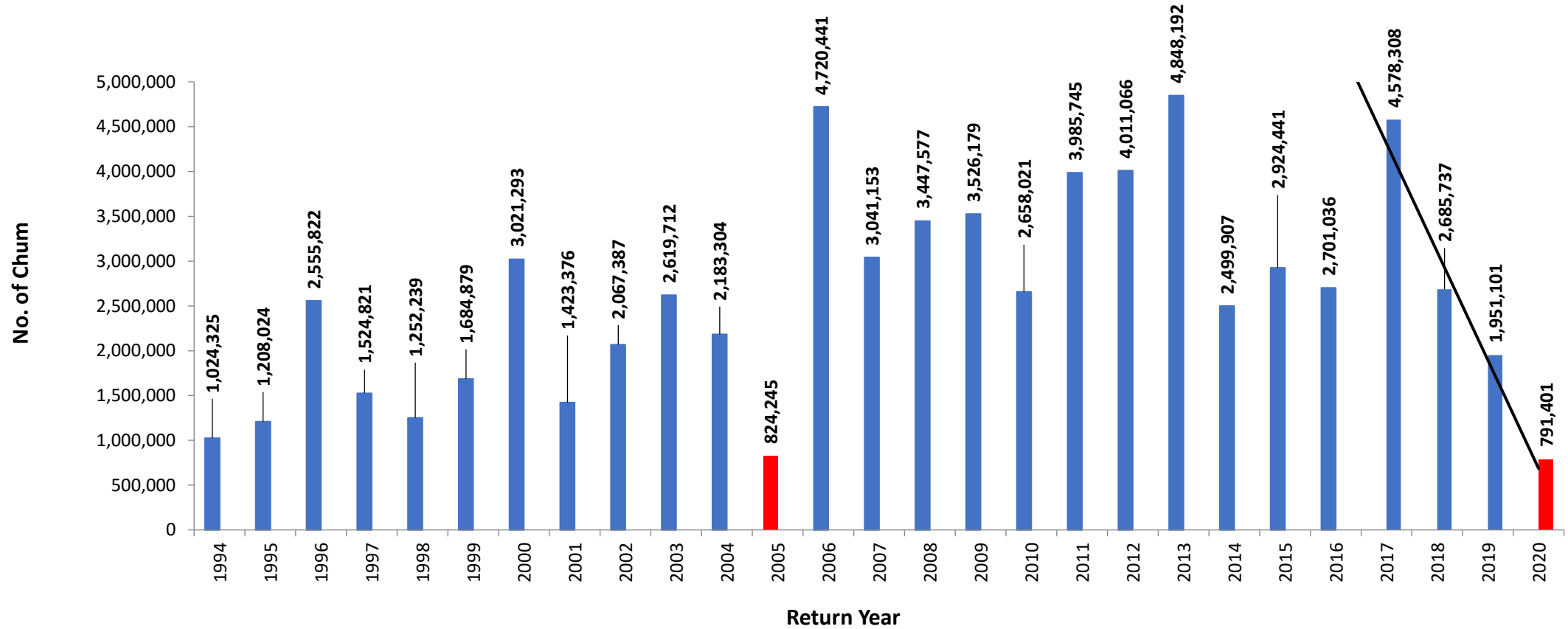


# 2020 Chum Return: Actual vs. Projected Harvest



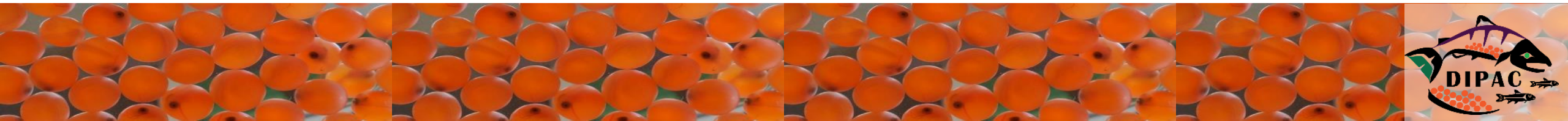
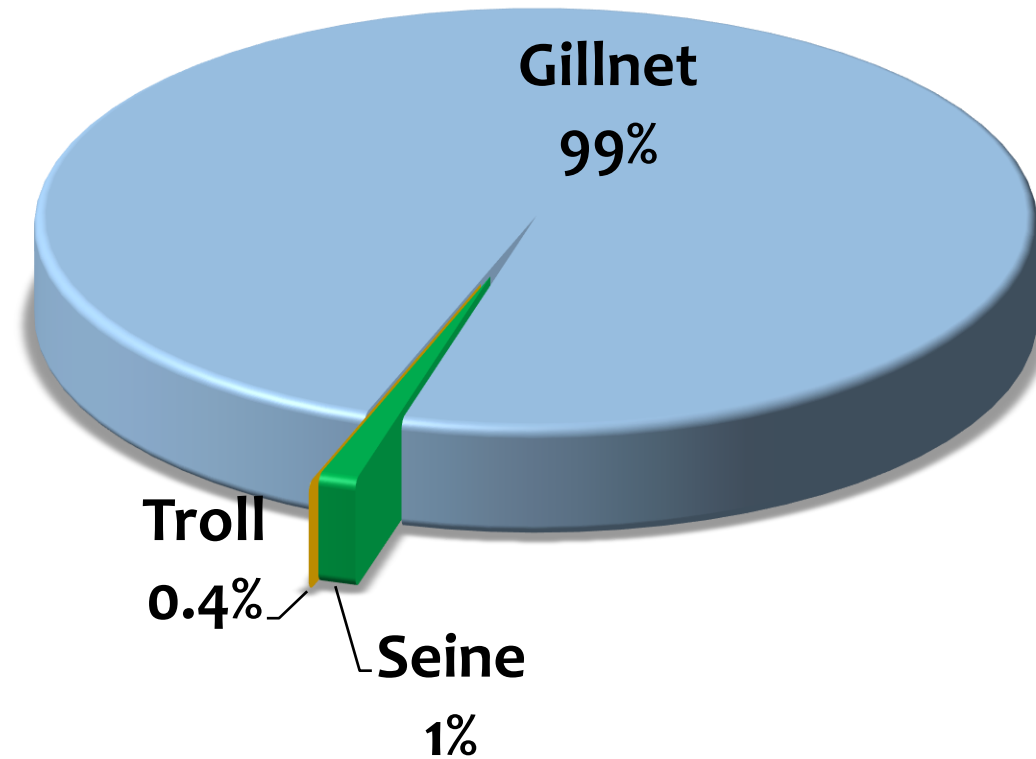
# Historical Chum Returns

Total DIPAC Chum Returns



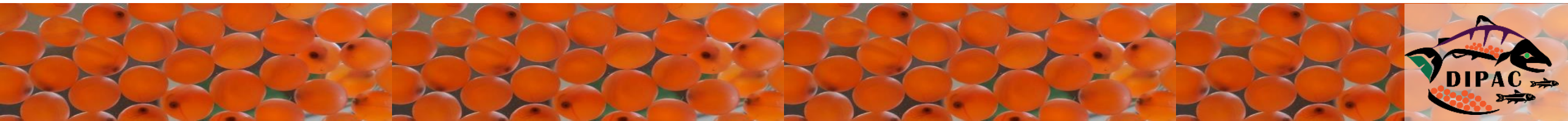
# 2020 Chum Contributions

Gillnet, Seine, & Troll Harvest

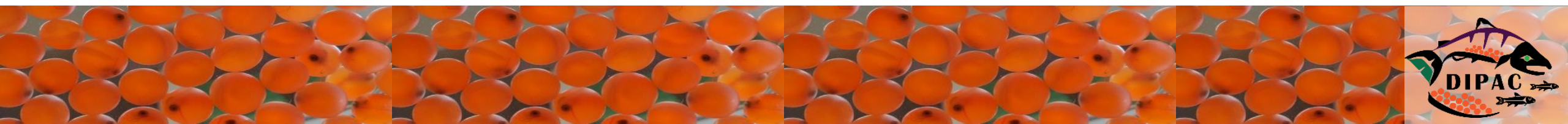
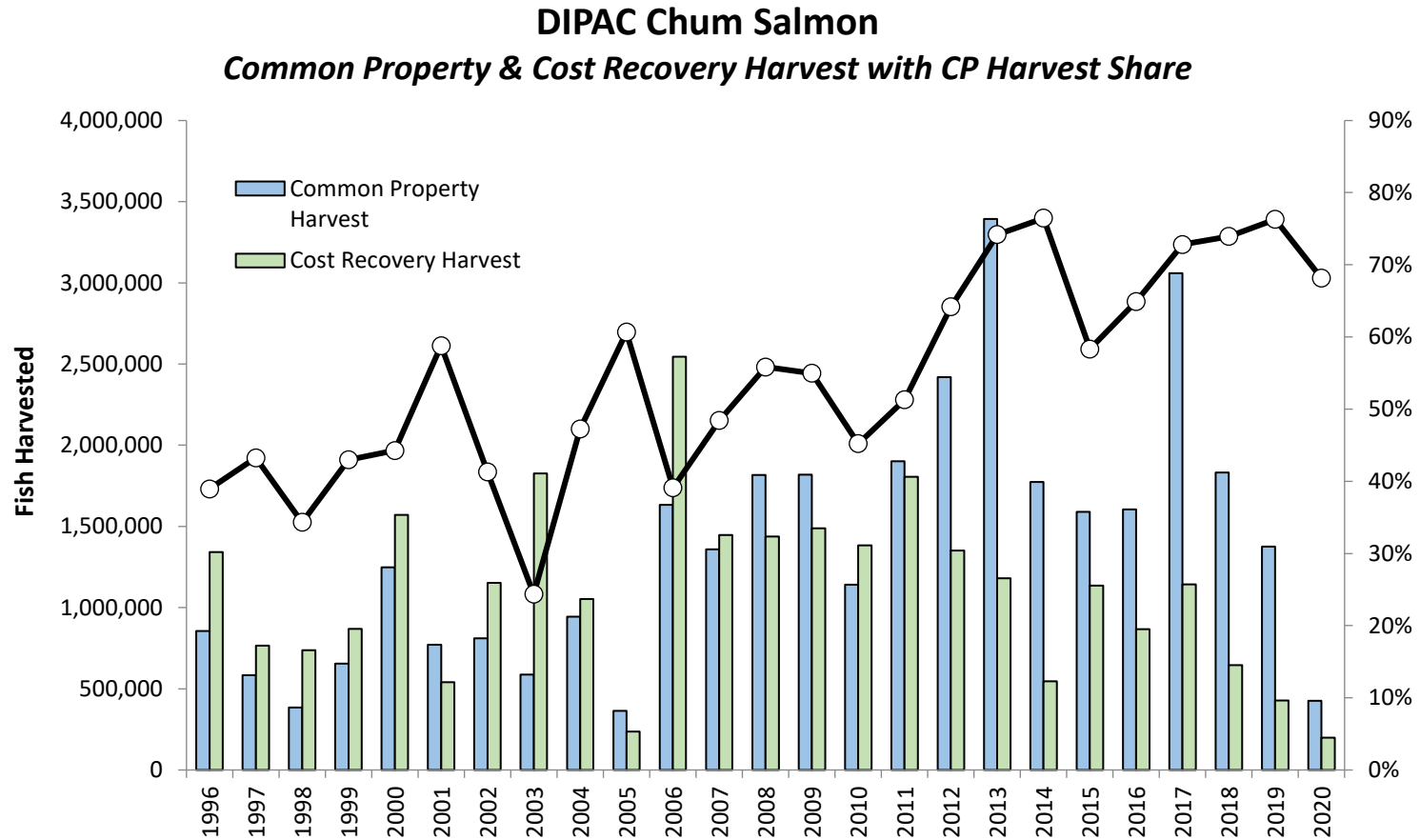


# 2020 Chum Return: Contribution, Cost Recovery, & Harvest Shares

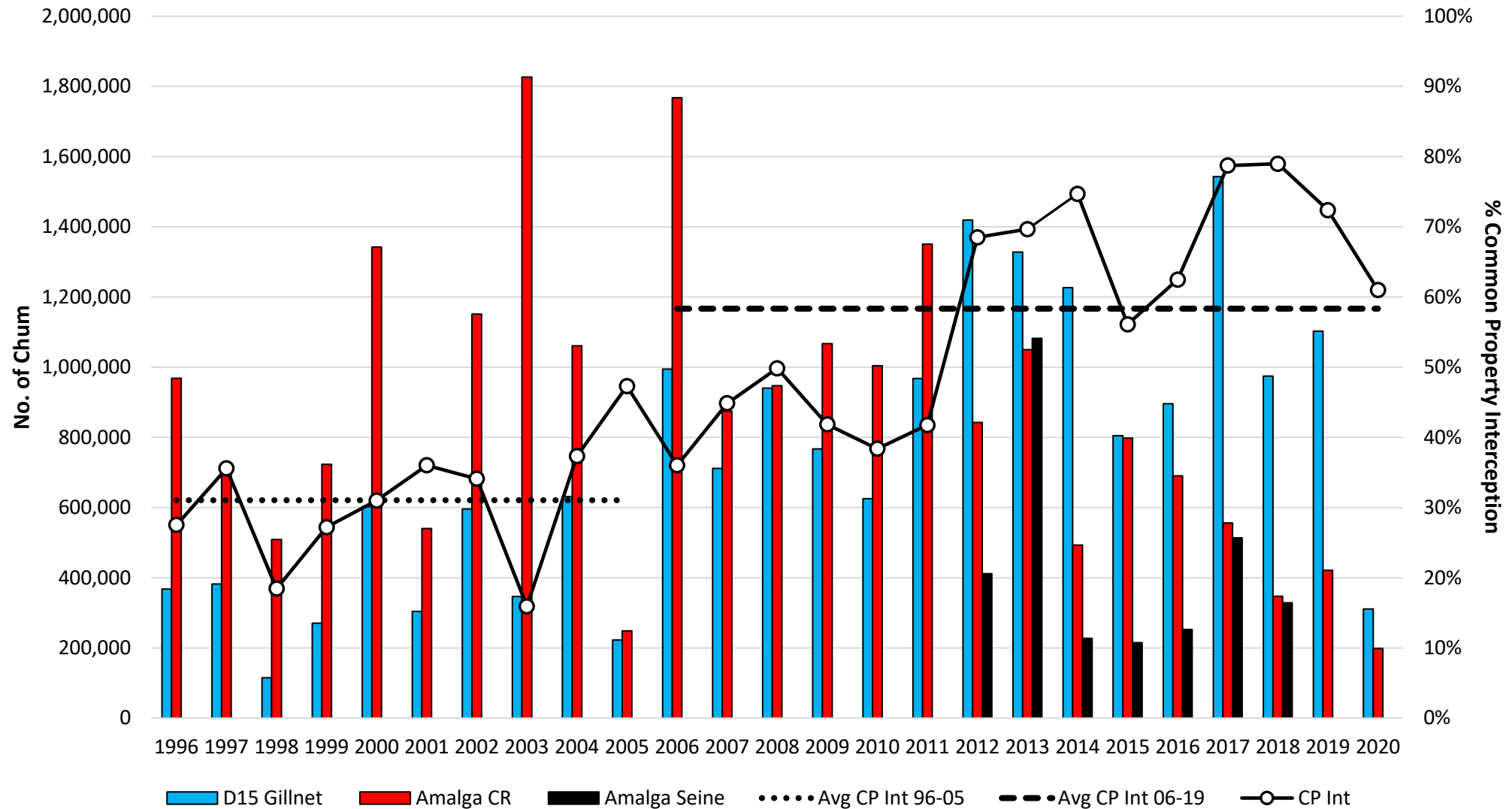
	Common Property Harvest	DIPAC Contrib.	% DIPAC Contrib.	Cost Recovery	Total Harvest
Lynn Canal GN	314,800	310,400	99%	204,100	514,500
Taku/Stephens GN	109,000	106,700	98%	350	107,000
Homeshore Troll	12	9	73%	0	9
Amalga CP-Seine	0	0	0%	0	0
Other Seine	8,200	5,100	63%	0	5,100
Misc. SEAK	2,600	2,600	100%	0	2,600
Sport	0	500		0	500
Broodstock & Esc.	0	0		0	161,600
<b>Total</b>	<b>434,600</b>	<b>425,300</b>	<b>98%</b>	<b>204,500</b>	<b>791,400</b>
Harvest Shares		68%		32%	



# DIPAC Chum Harvest: Cost Recovery, Common Property, & Harvest Shares

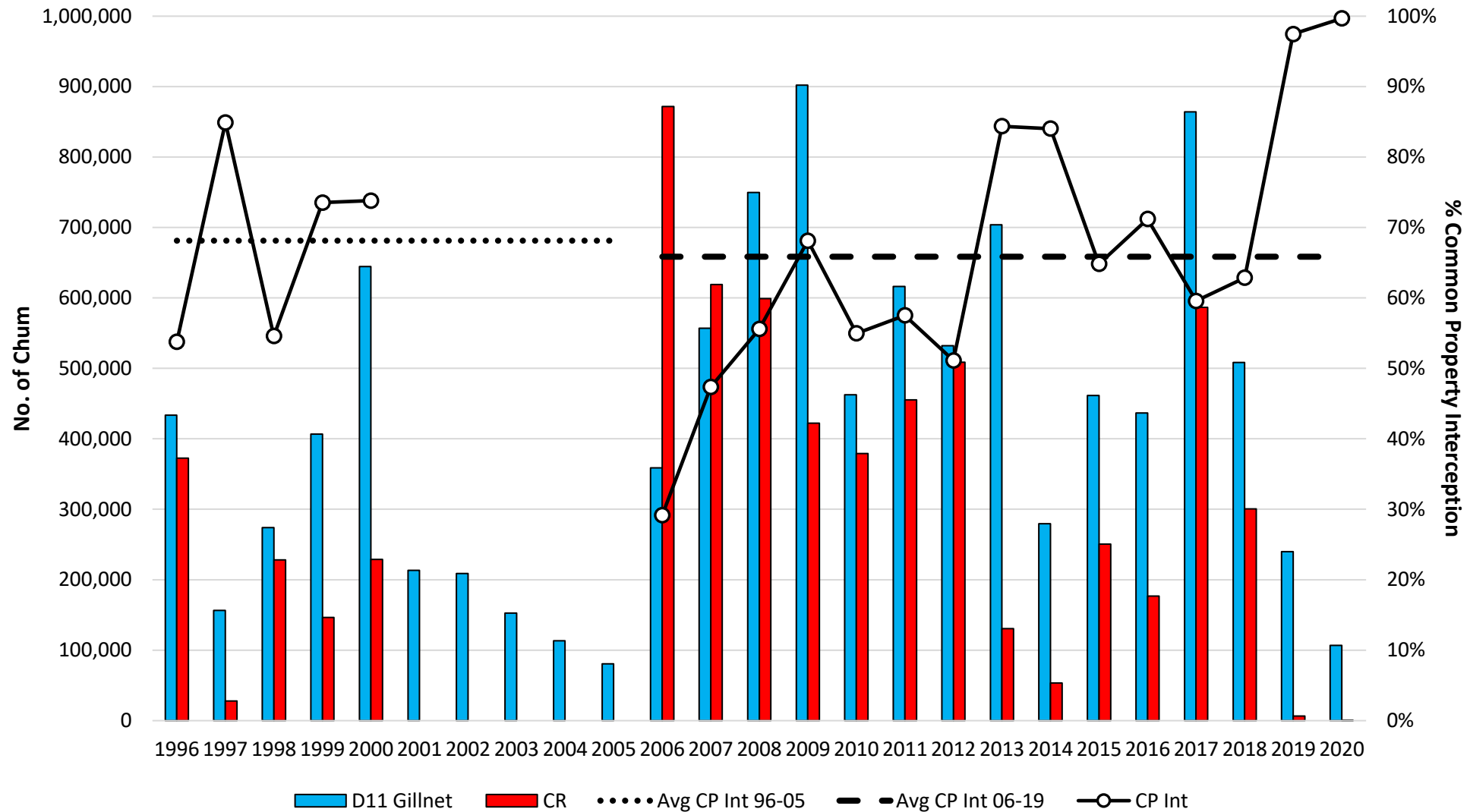


# District 115 Chum Contribution: Gillnet & Amalga SHA Seine



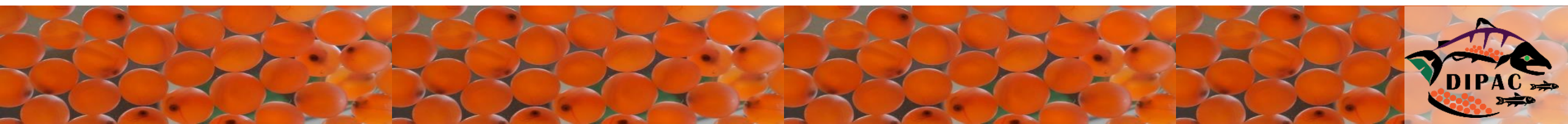


# District 111 Chum Contribution: Gillnet & Cost Recovery Seine



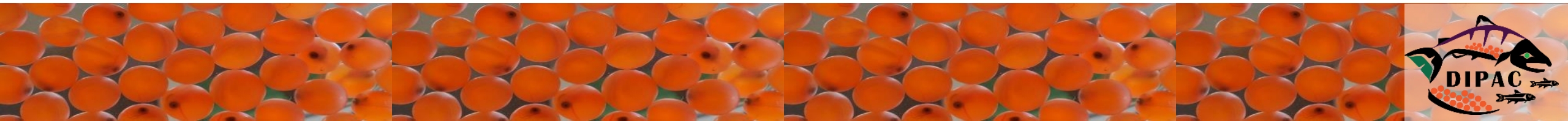
# 2020 Chum Return: Cost Recovery Summary

	<b>Fish</b>	<b>Pounds</b>
Amalga Harbor	<b>204,100</b>	<b>1,462,400</b>
Gastineau Channel	<b>160</b>	<b>1,600</b>
Macaulay Hatchery	<b>190</b>	<b>720</b>
	<b>204,500</b>	<b>1,464,800</b>



# Chum Marine Survival

Broodyear	Age 3	Age 4	Age 5	Age 6	Total
2013	0.03%	2.75%	1.15%	0.03%	<b>3.97%</b>
2014	0.09%	0.94%	0.25%	0.01%	<b>1.29%</b>
2015	0.32%	1.65%	0.10%		<b>2.07%</b>
2016	0.08%	0.52%			<b>0.59%</b>
2017	0.17%				<b>0.17%</b>



# Preliminary Alaska Chum Harvest

## 2020 Weekly Alaska Salmon Harvest Update #14

Harvest Through Statistical Week 37 (9/12/2020)

(Thousand Fish)

	Sockeye			Pink			Keta			Coho			Chinook		
	YTD 2019	YTD 2020	YoY	YTD 2018	YTD 2020	YoY	YTD 2019	YTD 2020	YoY	YTD 2019	YTD 2020	YoY	YTD 2019*	YTD 2020*	YoY
AYK	8	0	-100%	79	12	-85%	1,131	190	-83%	195	17	-91%	6	1	-83%
Kodiak	2,119	1,455	-31%	5,942	21,300	258%	553	370	-33%	388	406	5%	8	8	0%
Chignik	639	0	-100%	0	0	-	158	0	-100%	249	0	-100%	4	0	-100%
AK Pen. & Aleutian Is.	4,039	2,559	-37%	795	4,157	423%	1,399	653	-53%	565	160	-72%	26	20	-23%
Bristol Bay	43,028	39,249	-9%	244	59	-76%	1,395	265	-81%	81	97	20%	35	5	-86%
Cook Inlet	2,112	774	-63%	1,691	2,809	66%	186	39	-79%	178	136	-24%	3	1	-67%
Prince William Sound	2,603	936	-64%	22,288	21,720	-3%	5,145	1,991	-61%	518	242	-53%	19	4	-79%
Southeast	1,010	363	-64%	8,044	7,496	-7%	9,146	3,950	-57%	1,439	800	-44%	173	181	5%
<b>Statewide</b>	<b>55,292</b>	<b>45,340</b>	<b>-18%</b>	<b>39,085</b>	<b>57,560</b>	<b>47%</b>	<b>19,116</b>	<b>7,457</b>	<b>-61%</b>	<b>3,615</b>	<b>1,860</b>	<b>-49%</b>	<b>276</b>	<b>227</b>	<b>-18%</b>

Note: Data is subject to revision and excludes some volume to maintain confidentiality. Regional totals may not sum to statewide total. \*Chinook figures exclude harvest before week 20.

Source: Alaska Department of Fish & Game.

### 2020 Harvest v. Projection

(Thousand Fish)

	Harvest	Projection	% Realized
Sockeye	45,340	48,100	94%
Pink	57,560	60,600	95%
Keta	7,457	19,400	38%
Coho	1,860	4,200	44%
Chinook	227	320	71%
<b>Total</b>	<b>112,444</b>	<b>132,620</b>	<b>85%</b>



# Age 3 – 4 Sibling Relationship

- How many age 4 to expect based on the number of returning age 3
- 2003 – 2013, average ratio is 37
- 2014 – 2016, average ratio is 7
- Standard forecasting methods are uninformative & unrealistic

BY	Age-3	Age-4	$\frac{3}{4}$ Ratios
2003	170,150	1,870,045	11
2004	115,138	2,665,516	23
2005	65,131	2,362,953	36
2006	46,917	1,520,281	32
2007	116,213	3,432,837	30
2008	62,260	2,400,581	39
2009	84,968	3,082,225	36
2010	26,934	760,453	28
2011	43,842	2,130,716	49
2012	50,009	1,839,401	37
2013	37,322	3,177,787	85
2014	98,348	1,010,290	10
<b>2015</b>	<b>302,148</b>	<b>1,571,409</b>	<b>5</b>
<b>2016</b>	<b>75,040</b>	<b>508,561</b>	<b>7</b>
<b>2017</b>	<b>178,487</b>		

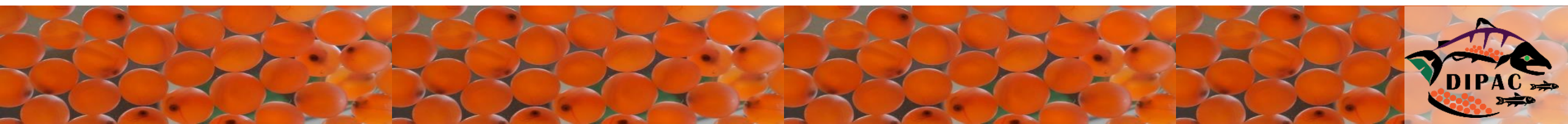


# Sockeye



# 2020 Sockeye Return: Totals by Age

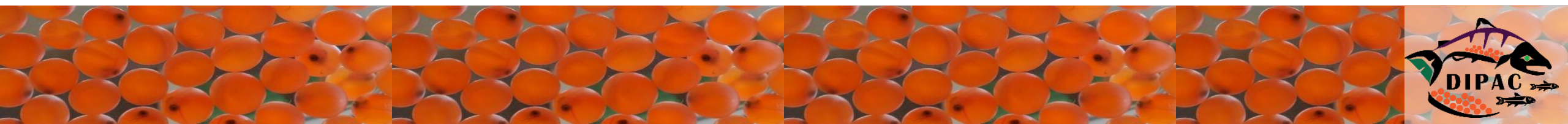
	<b>Age-4</b>	<b>Age-5</b>	<b>Total</b>
Actual:	<b>83,500</b>	<b>20,800</b>	<b>104,300</b>
Projected:	<b>132,600</b>	<b>93,300</b>	<b>225,900</b>
% of Projected:	<b>49%</b>	<b>60%</b>	<b>46%</b>



# 2020 Sockeye Return

	<b>Common Property</b>	<b>Cost Recovery</b>	<b>Broodstock<sup>1</sup></b>	<b>Total</b>
Actual:	<b>30,500</b>	<b>72,100</b>	<b>6,900</b>	<b>109,600</b>
Projected:	<b>111,100</b>	<b>108,000</b>	<b>6,800</b>	<b>225,900</b>
% of Projected:	<b>27%</b>	<b>67%</b>	<b>100%</b>	<b>49%</b>

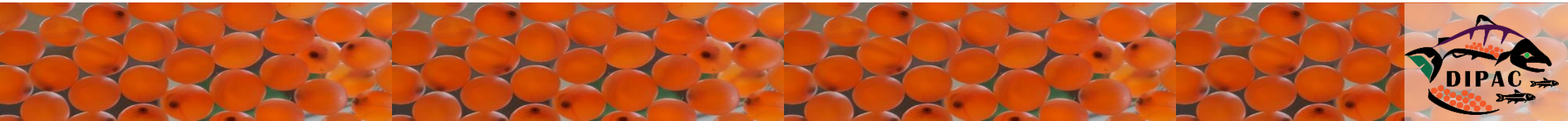
1) Includes end-of-season unmarketable fish.





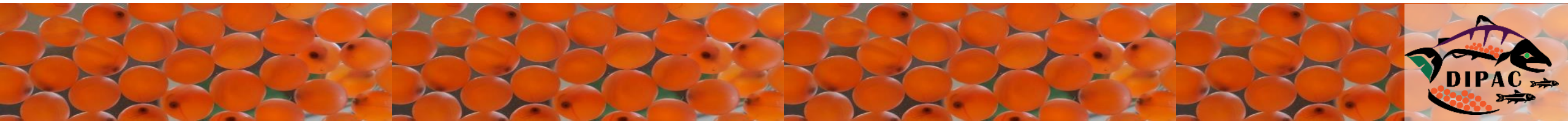
# 2020 Sockeye Return: Contribution, Cost Recovery, & Harvest Shares

	CP Harvest	DIPAC Contribution	Cost Recovery	Total Harvest
District 11 Gillnet	28,200	16,400	72,100	88,600
Other Gillnet	60,000	9,700	0	9,700
Seine	1,300	300	0	300
Personal Use	4,100	4,100	0	4,100
Broodstock	0	0	0	6,900
<b>Total</b>	<b>93,500</b>	<b>30,500</b>	<b>72,100</b>	<b>109,600</b>
Harvest Shares		<b>30%</b>	<b>70%</b>	

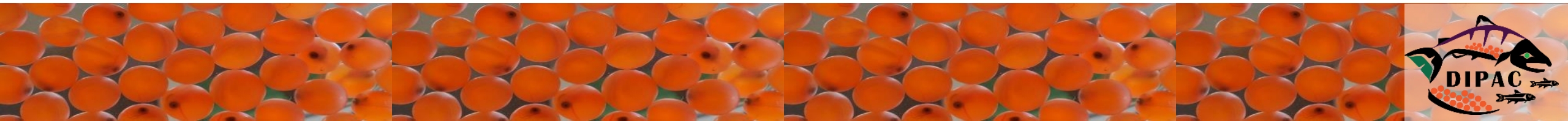
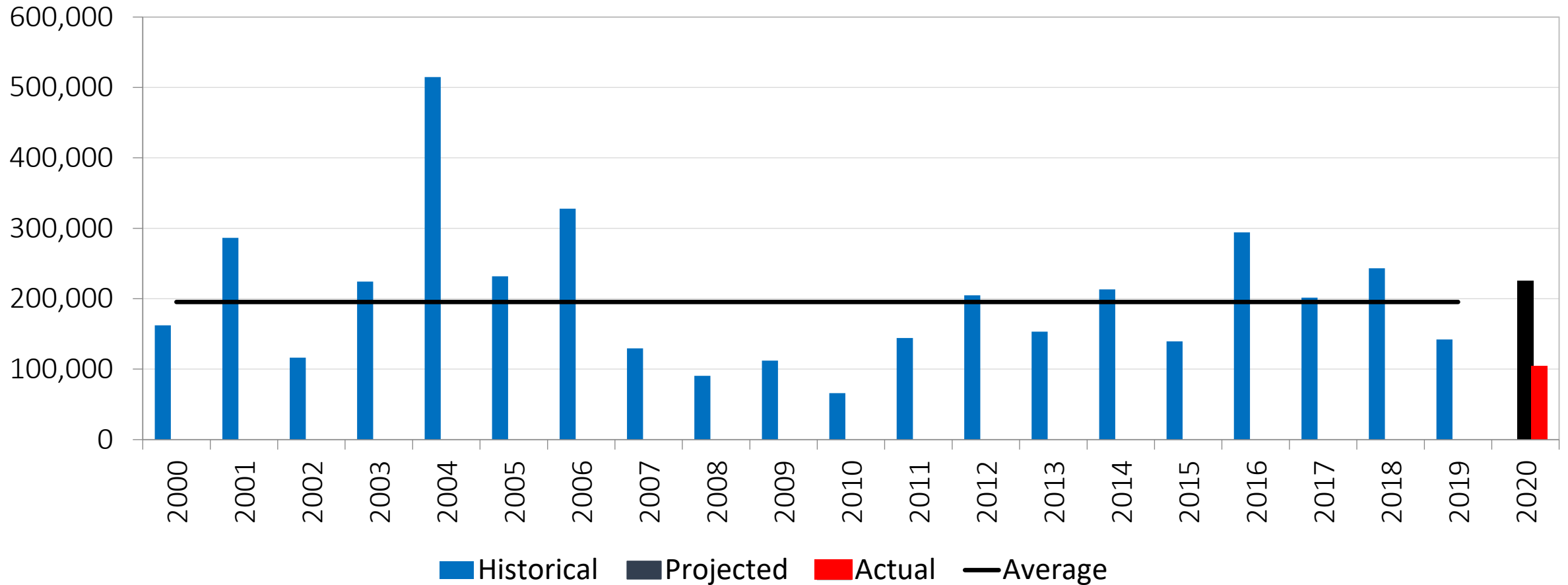


# Sockeye Marine Survival

Broodyear	Age 3	Age 4	Age 5	Total
2013	0.13%	1.07%	0.29%	<b>1.48%</b>
2014	0.23%	2.60%	0.76%	<b>3.59%</b>
2015	0.00%	0.75%	0.26%	<b>1.01%</b>
2016	0.20%	0.93%		<b>1.13%</b>
2017	0.11%			<b>0.11%</b>



# 2020 Sockeye Return: Actual vs. Projected Return

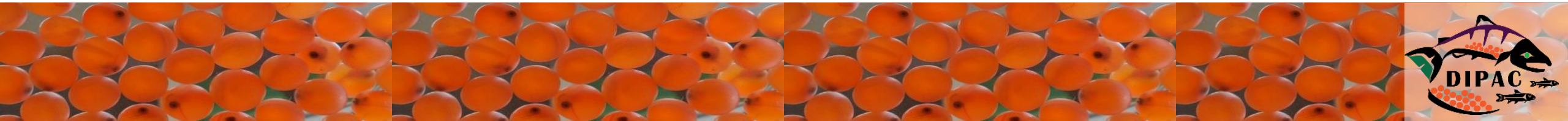


# Coho

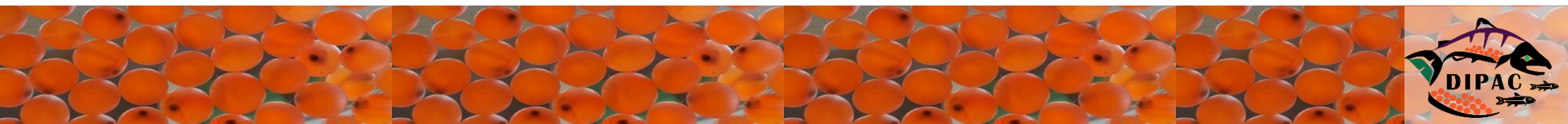
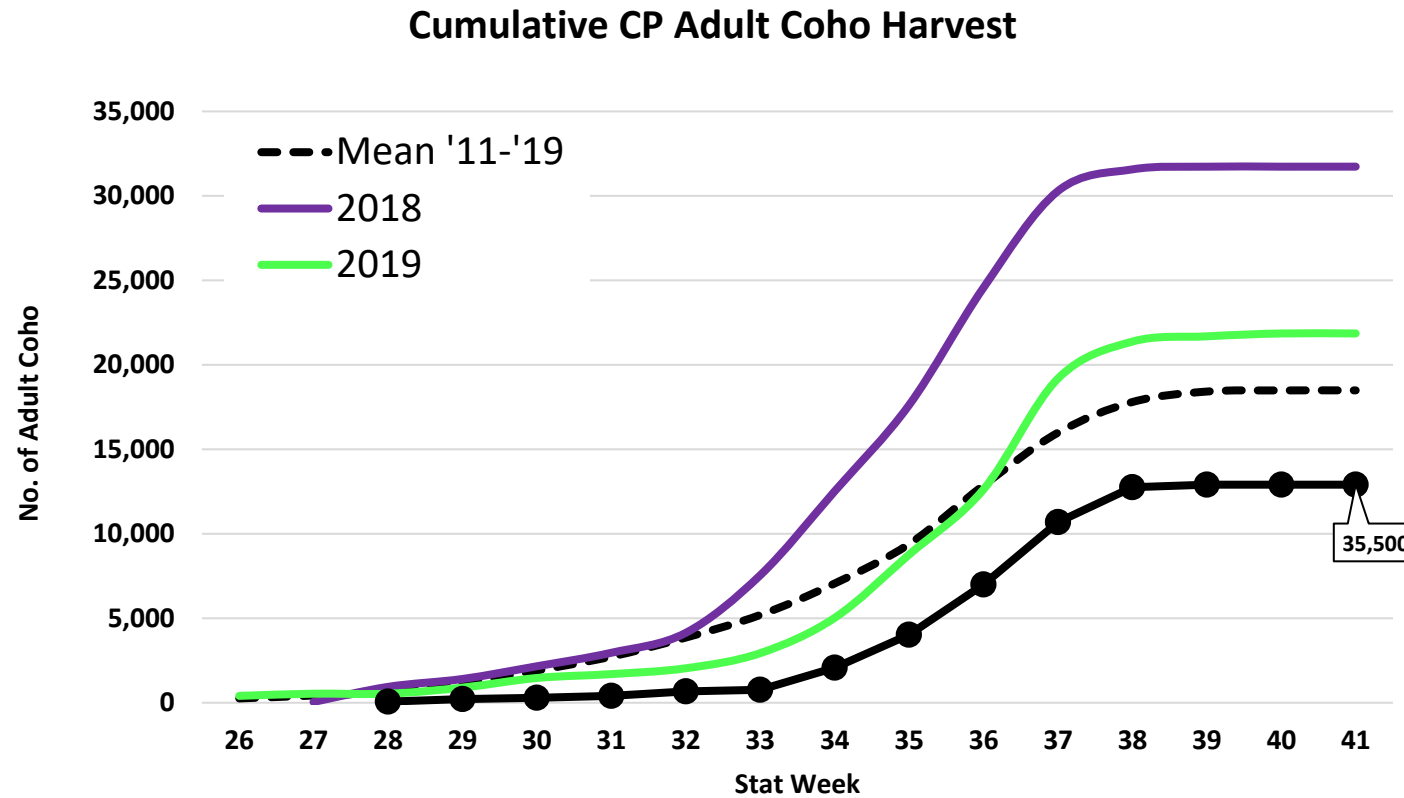


# Coho Returns

Troll	Gillnet & Seine	Marine Sport	Gastineau Shoreline	Cost Recovery	Brood & Donations	Total	% Marine Survival
2,700	8,900	1,300	8,000	13,400	1,200	35,500	3.3%
					2020 Forecast	40,000	3.7%
					% of Forecast	89%	

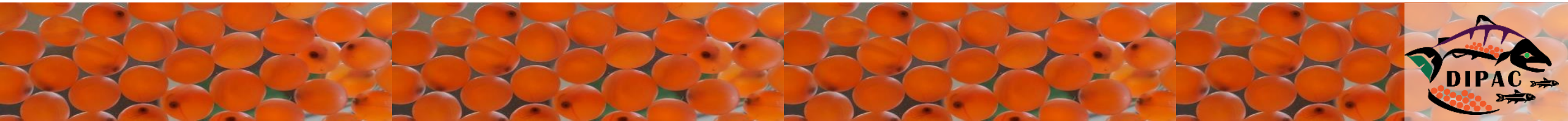


# Coho Returns



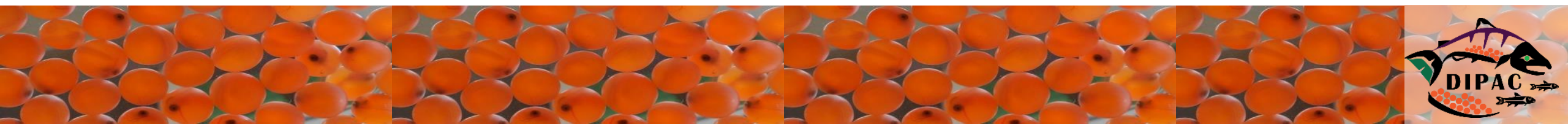
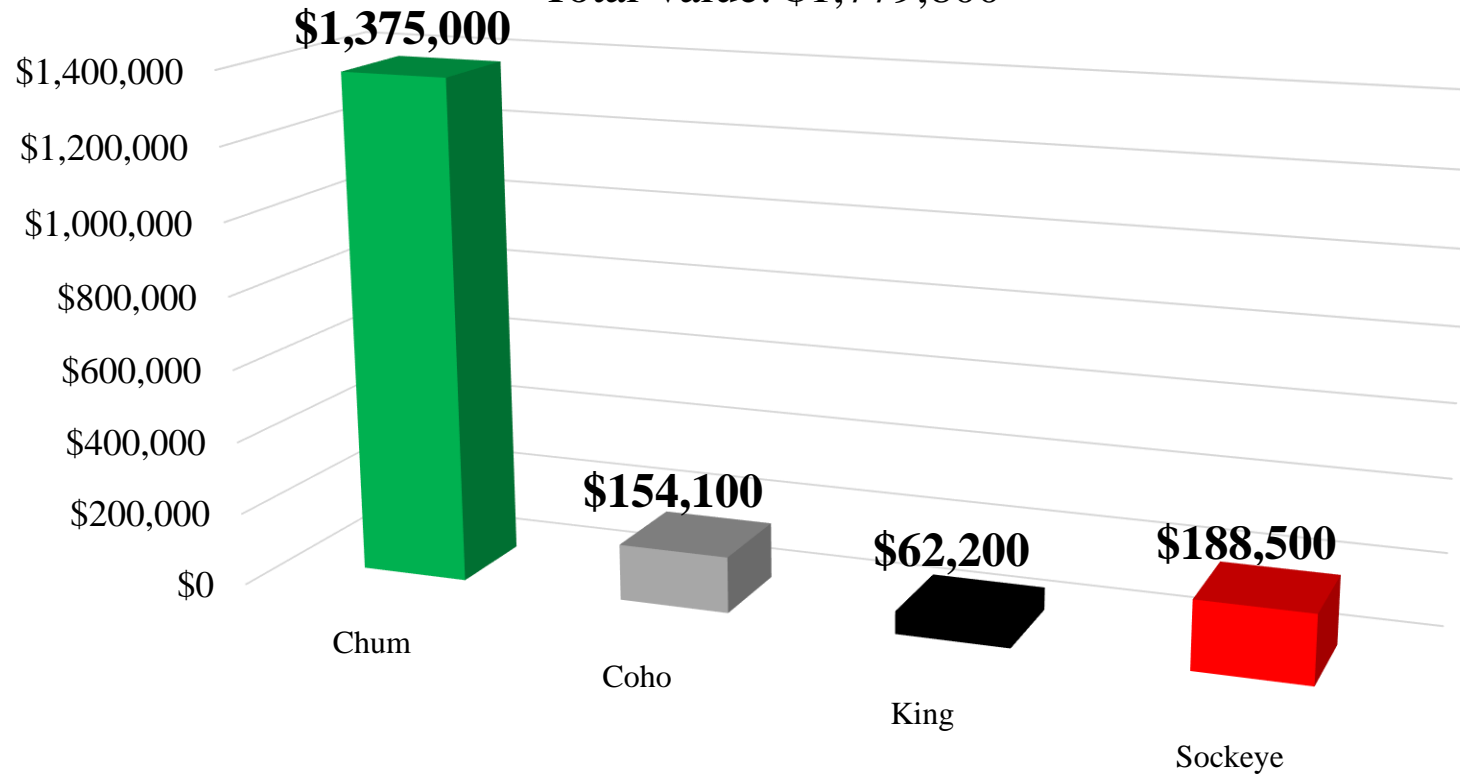


# Estimated (\$) Value & Contributions



# 2020 Contributions

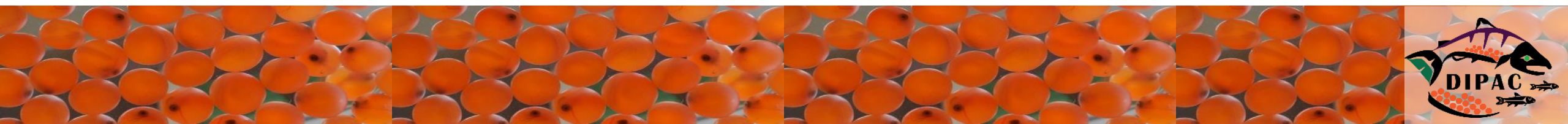
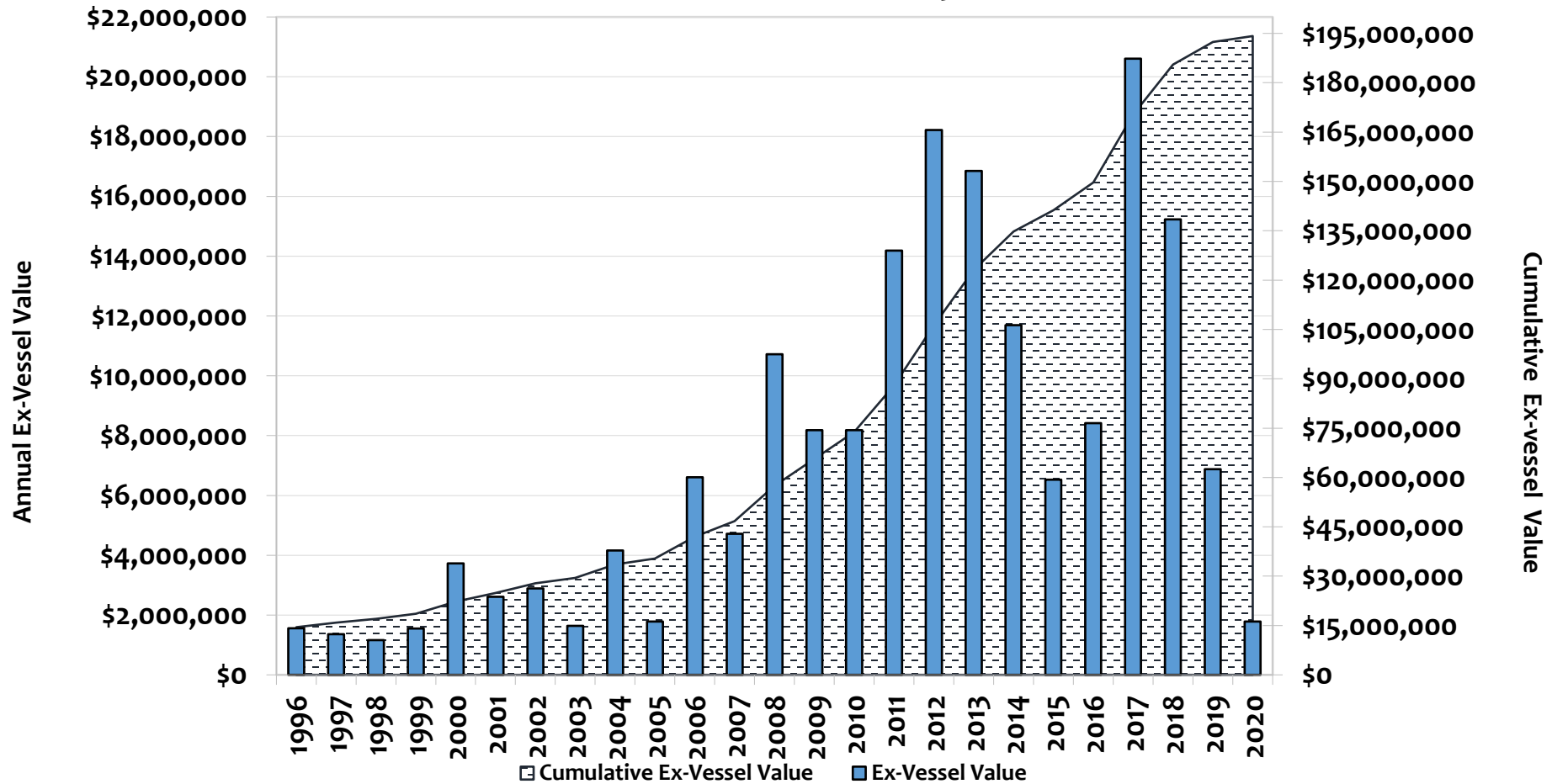
2020 Ex-Vessel Values  
From DIPAC Salmon Enhancement Projects  
Total Value: \$1,779,800



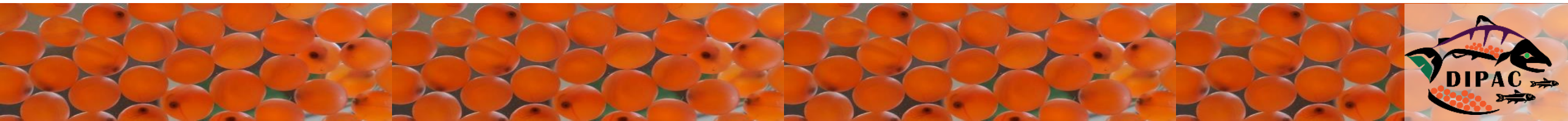


# DIPAC Salmon Contributions

Cumulative Ex-Vessel Value: \$194,182,600

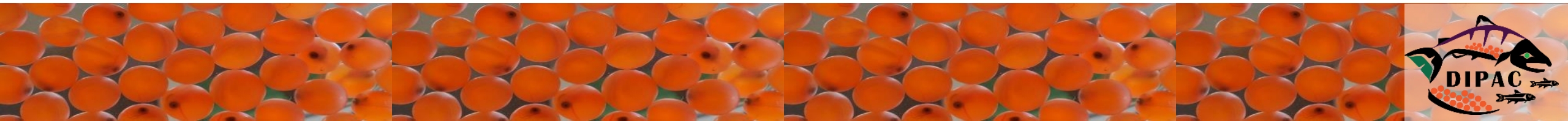


# 2021 Forecast



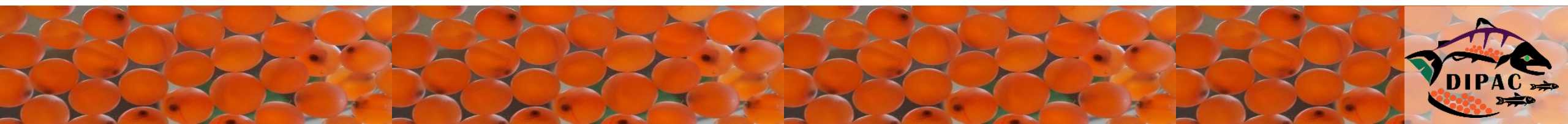
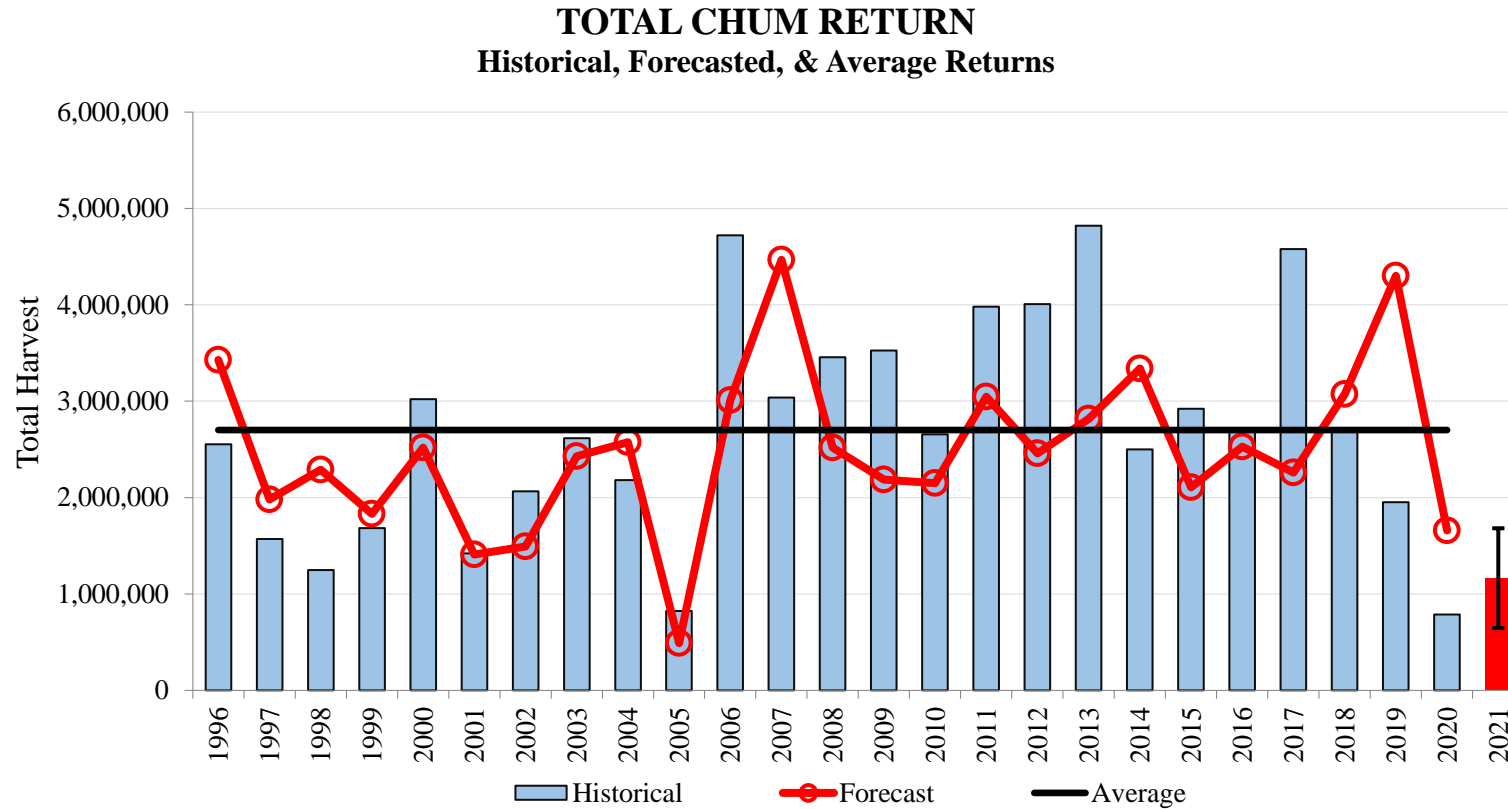
# 2021 Chum Forecast

	Low End	Mid Point	High End	Common Property	Cost Recovery	Brood
Taku/Stephens	188,400	<b>407,300</b>	626,100	216,200	1,000	<b>190,000</b>
Lynn Canal/ Amalga	356,400	<b>655,700</b>	955,000	394,800	260,900	
Total	544,800	<b>1,063,000</b>	1,581,000	<b>611,000</b>	<b>261,900</b>	



# 2021 Chum Forecast

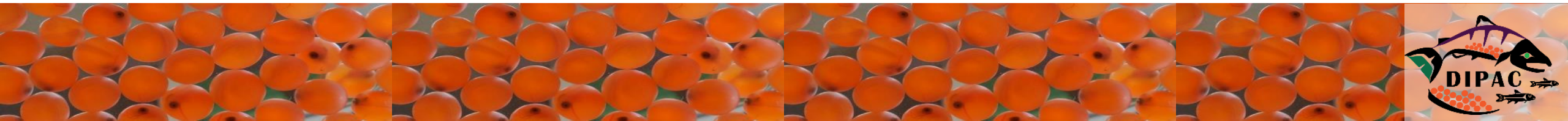
## Historical & Projected Returns



# 2021 Sockeye Forecast

	Low End	Mid Point	High End
Age 5	70,100	<b>98,100</b>	126,500
Age 4	0	<b>7,800</b>	31,500
Total	70,100	<b>106,100</b>	158,000

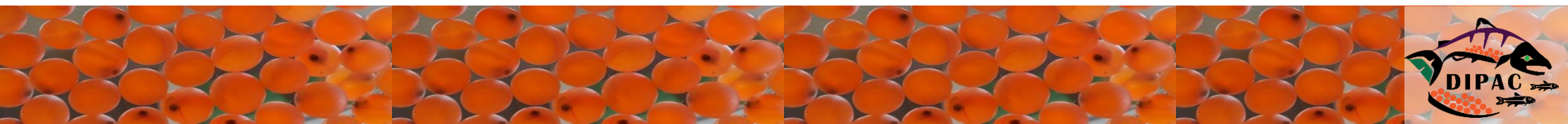
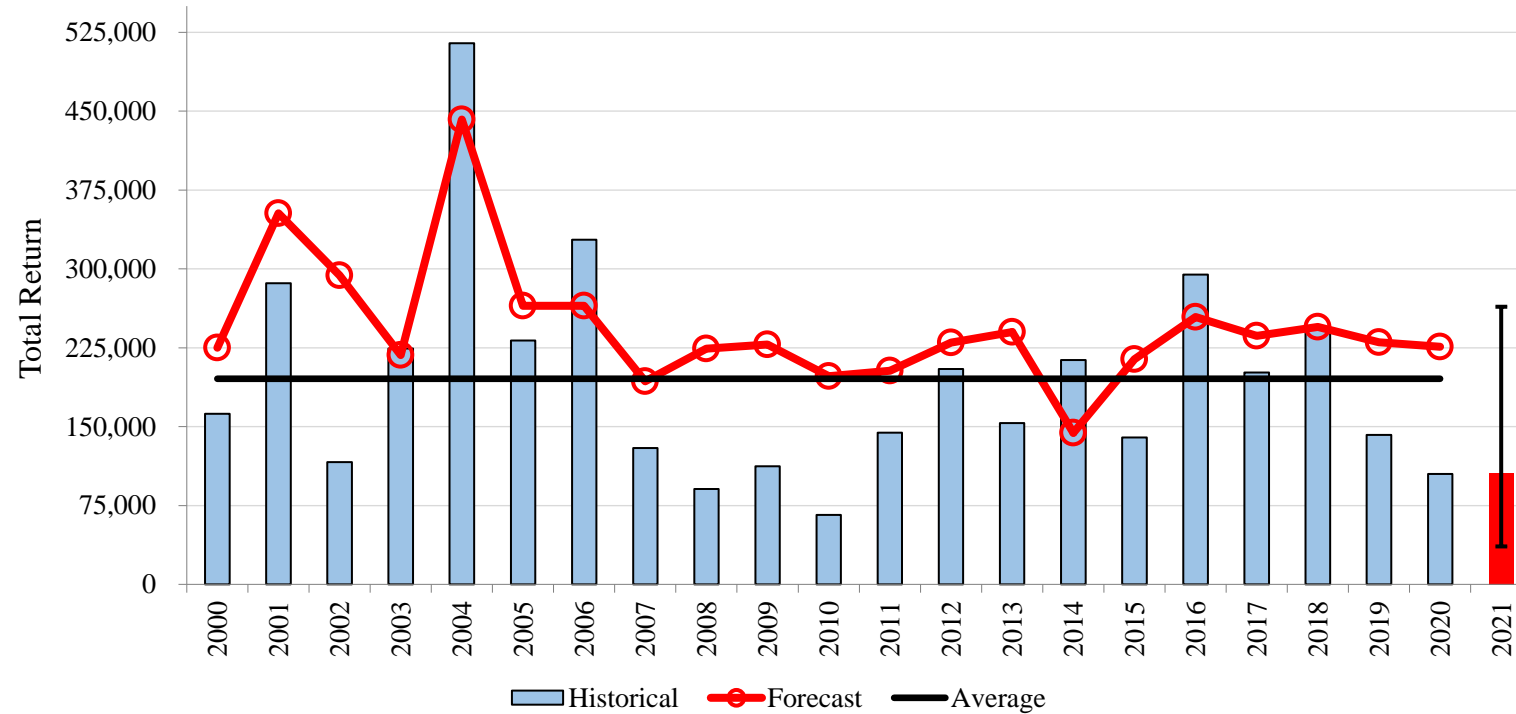
Harvest Share Goal		Average Harvest Shares	
70% CP:	69,500	51% CP:	50,400
30% CR:	29,800	49% CR:	49,000
Broodstock:	6,800	Broodstock:	6,800



# 2021 Sockeye Forecast

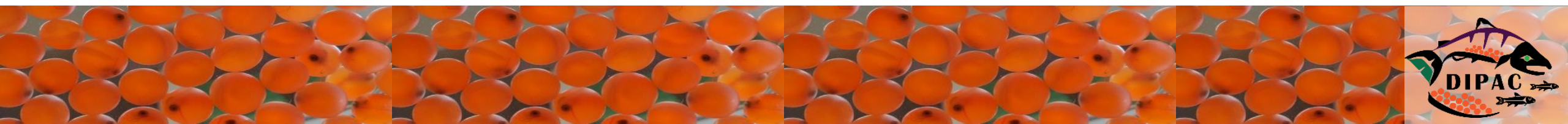
## Historical & Projected Returns

**DIPAC SOCKEYE SALMON**  
Historical, Forecasted, & Average Returns



# 2021 Chinook & Coho Forecast

	Number Returning	Marine Survival
Chinook (large adults, ages 5-7)	2,300	0.1%
Coho	44,000	4.4%





Thank You.