

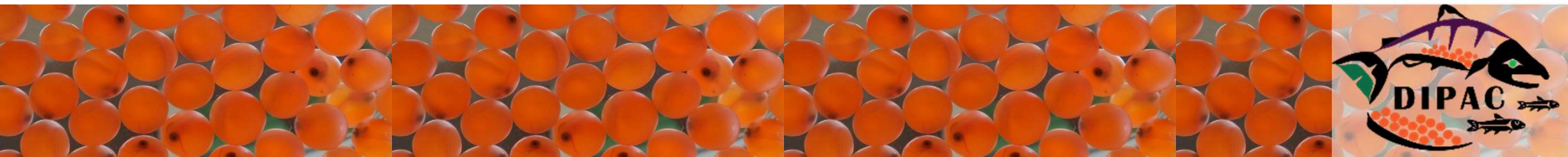
Southeast AK Seine Task Force Meeting  
December 3, 2019  
Sitka, AK

Adam Zaleski  
Research Manager

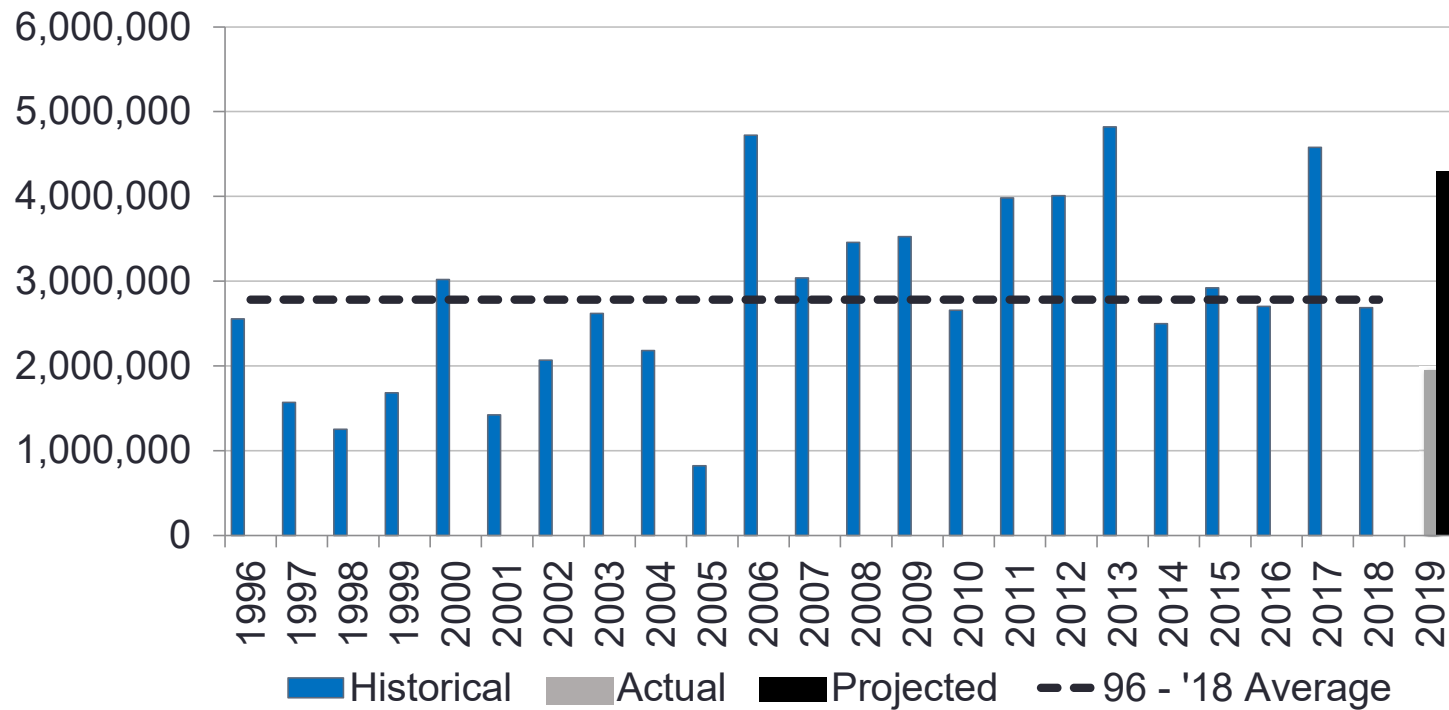


# 2019 Chum Return

	Age-3	Age-4	Age-5	Age-6	Total
Actual:	75,000	1,571,000	265,400	39,200	1,951,000
Projected:	65,000	3,632,000	551,000	52,000	4,300,000
% of Projected:	115%	43%	48%	75%	45%

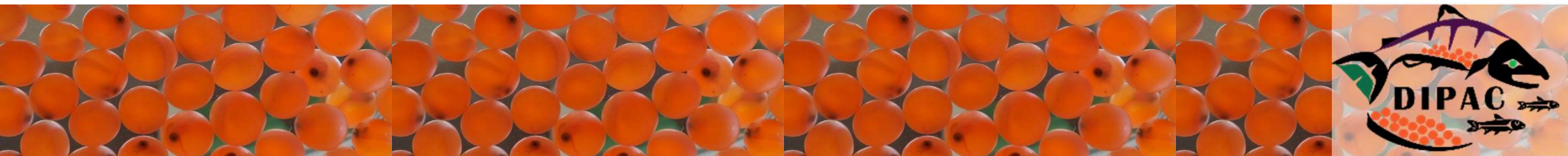
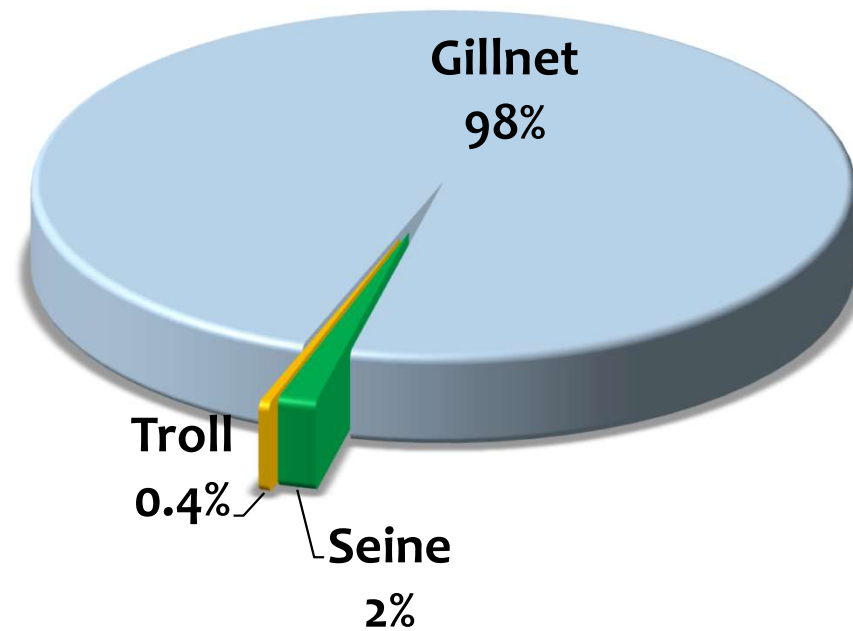


# 2019 Chum Return: Actual vs. Projected Harvest



# 2019 Chum Contributions

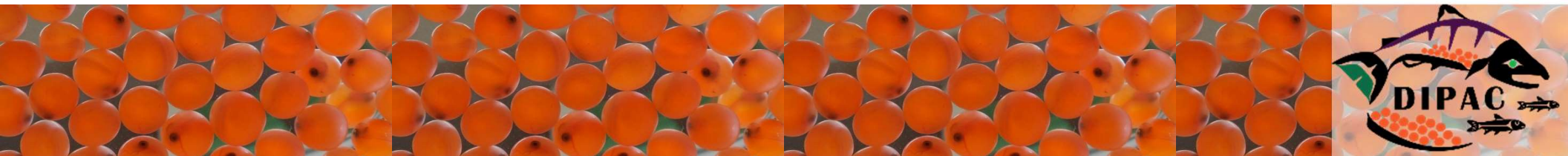
Gillnet, Seine, & Troll Harvest



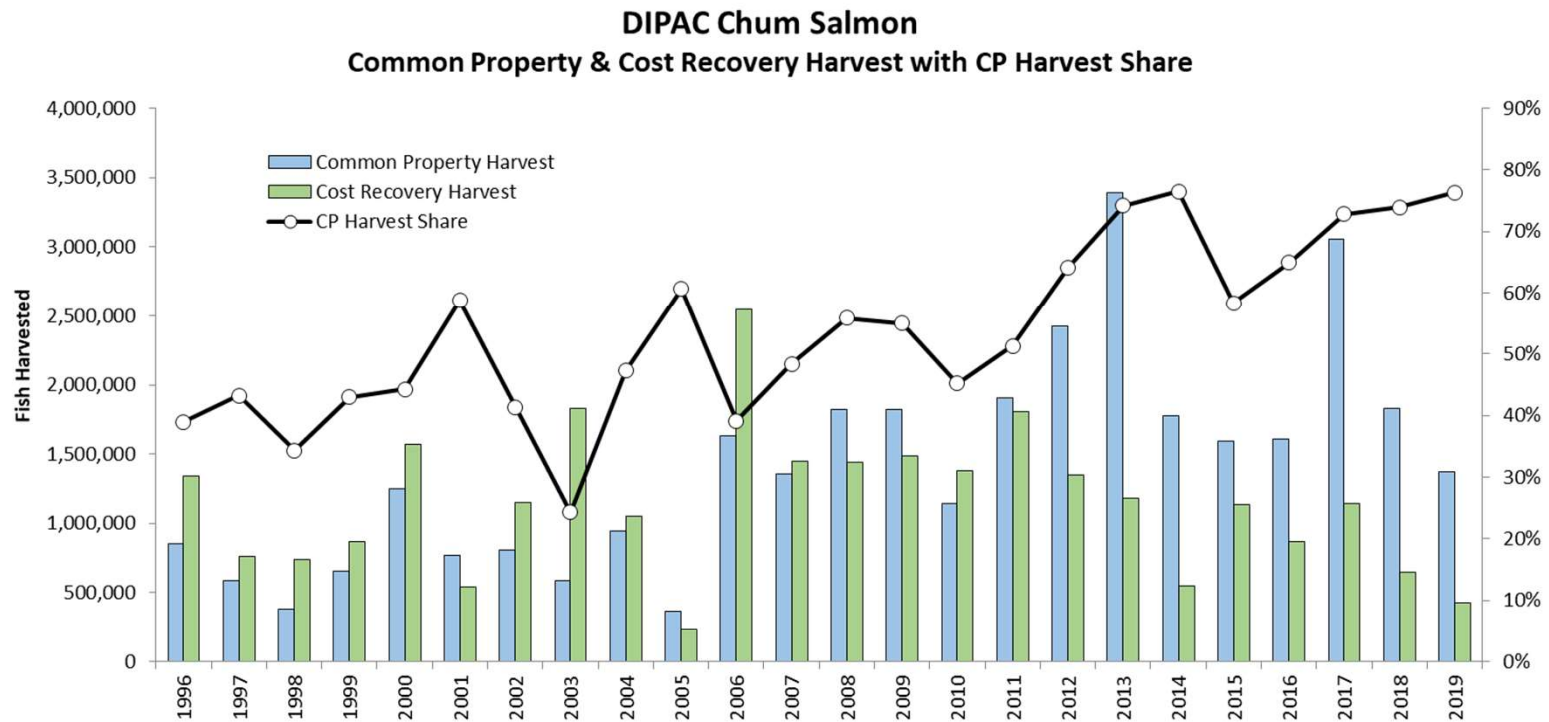
# 2019 Chum Return:

## Contribution, Cost Recovery, & Harvest Shares

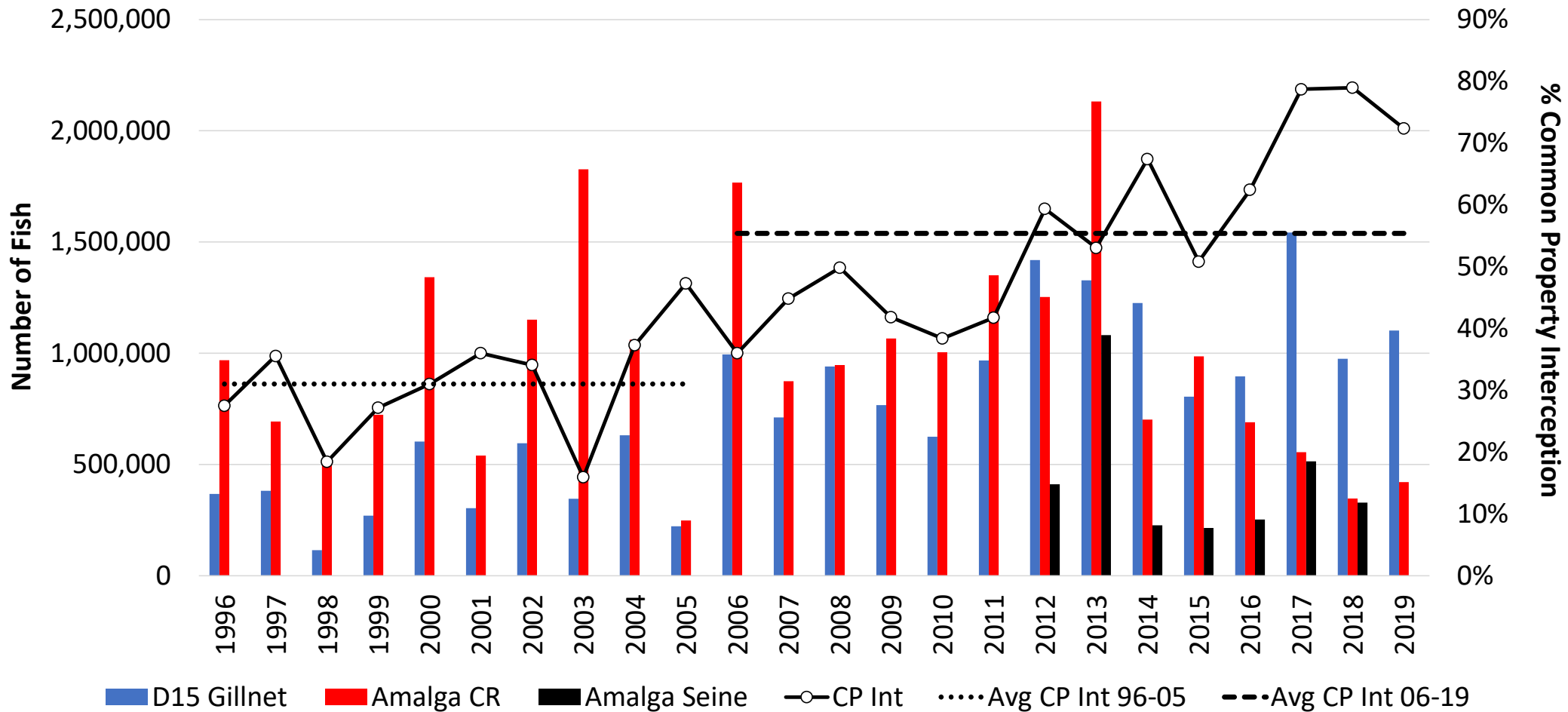
	Common Property Harvest	DIPAC Contrib.	% DIPAC Contrib.	Cost Recovery	Total Harvest
Lynn Canal GN	1,111,000	1,102,000	99%	421,100	1,524,000
Taku/Stephens GN	244,800	239,700	98%	6,300	246,000
Homeshore Troll	9,000	5,700	64%		5,700
Amalga CP-Seine	0	0	0%		0
Other Seine	53,400	17,400	33%		17,400
Misc. SEAK	8,700	8,700	100%		8,700
Sport	1,000	100%		1,000	1,000
Broodstock & Esc.					148,800
<b>Total</b>	<b>1,427,000</b>	<b>1,375,000</b>		<b>427,400</b>	<b>1,951,000</b>
Harvest Shares		<b>76%</b>		<b>24%</b>	



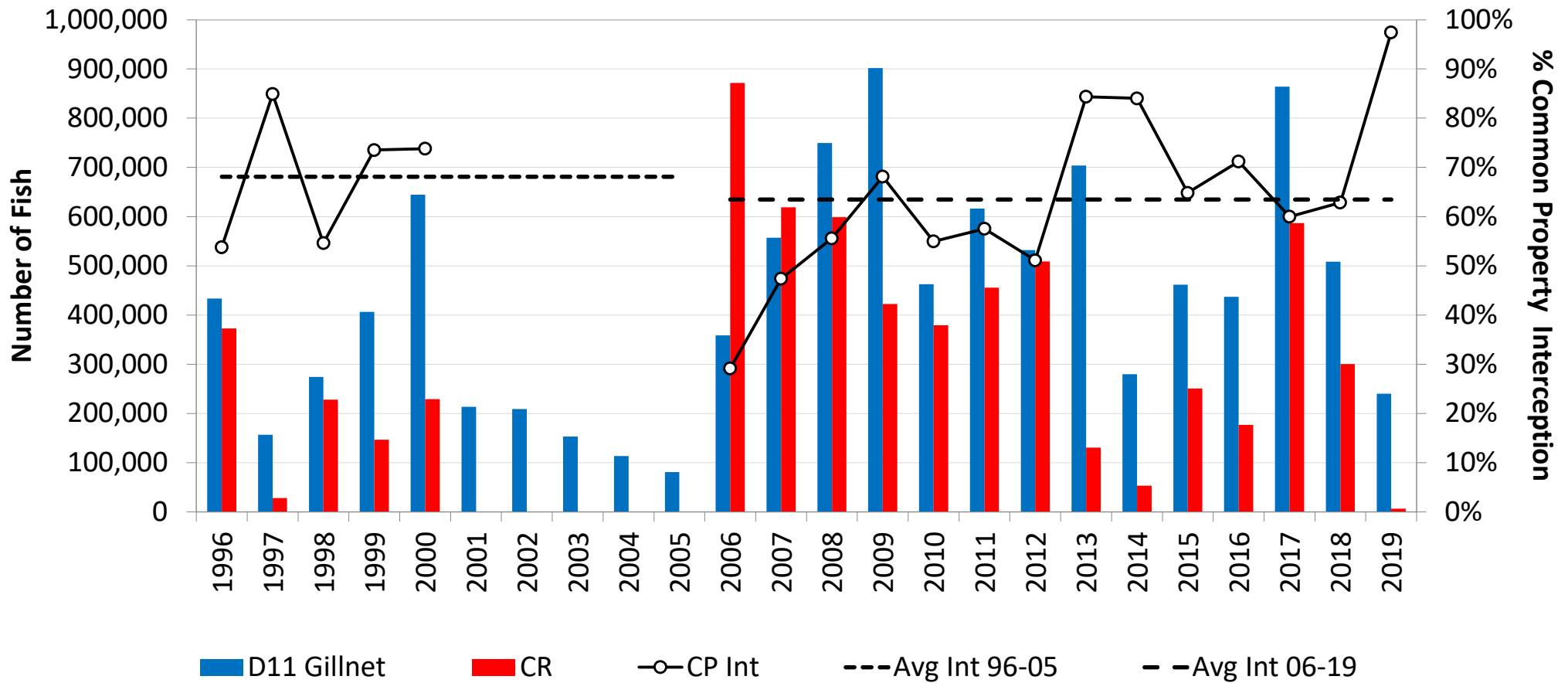
# DIPAC Chum Harvest: Cost Recovery, Common Property, & Harvest Shares



# District 115 Chum Contribution: Gillnet & Amalga SHA Seine



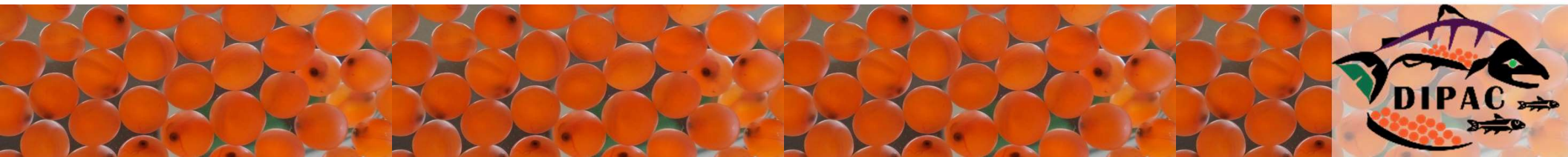
# District 111 Chum Contribution: Gillnet & Cost Recovery Seine





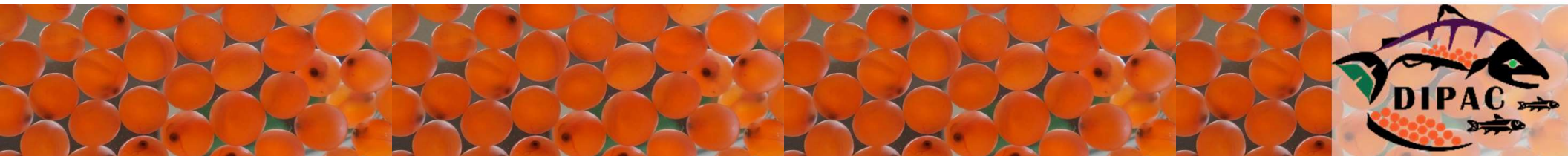
# 2019 Chum Return: Cost Recovery Summary

	<b>Fish</b>	<b>Pounds</b>
Amalga Harbor	<b>421,100</b>	<b>2,982,000</b>
Gastineau Channel	<b>6,200</b>	<b>49,100</b>
Macaulay Hatchery	<b>70</b>	<b>390</b>
	<b>427,400</b>	<b>3,031,000</b>

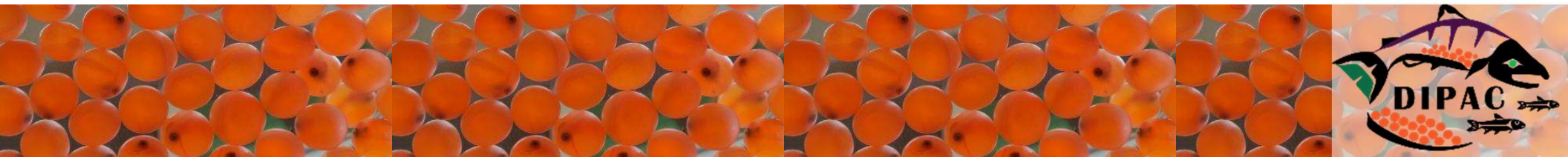


# Chum Marine Survival

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%		<b>1.28%</b>
2015	0.32%	1.65%			<b>1.97%</b>
2016	0.08%				<b>0.08%</b>



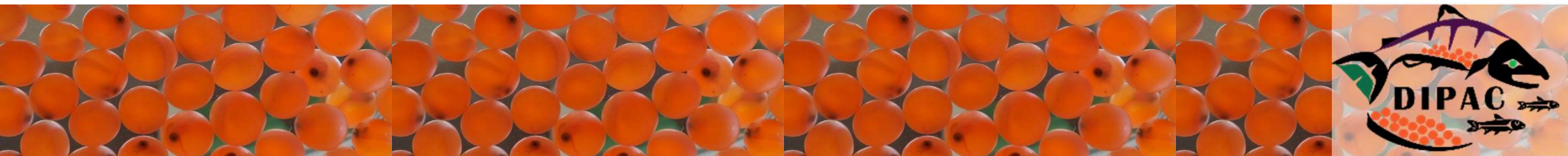
# Review of Anomalous 2018 Returns...



# 2018 Chum: Age-3 Return

- Average marine survival is 0.1%
- Average return is 75,000
- 2018 marine survival was 0.3%
- 2018 return was **302,200**
  - 367% of preseason forecast

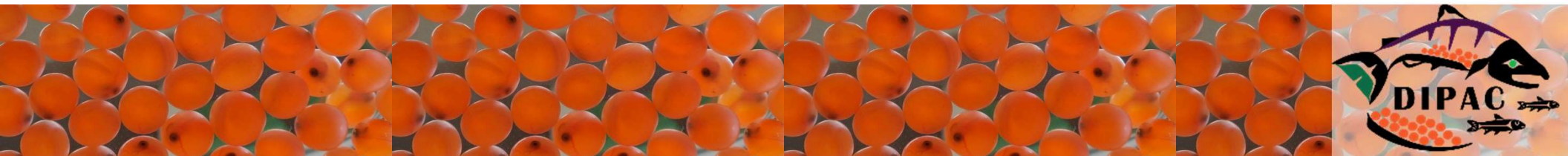
Brood Year	Age-3	Age-4
1992	212,239	2,304,001
1996	131,558	2,302,193
1999	135,742	2,203,037
2000	82,839	1,419,010
2003	170,150	1,870,045
2002	211,832	4,410,059
2004	115,138	2,665,516
2005	65,131	2,362,953
2007	116,213	3,432,837
2008	62,260	2,400,581
2009	84,968	3,082,225
2014	98,348	1,012,040
2015	<b>302,208</b>	



# 2018 Chum: Age-3 Return

- Largest age-3 return prior 2018
  - 1992 – 212,200 resulted in 2.3 million age-4 return
- Age-3 returns > 100,000
  - Produced an age-4 return range of
    - 2.5 million fish

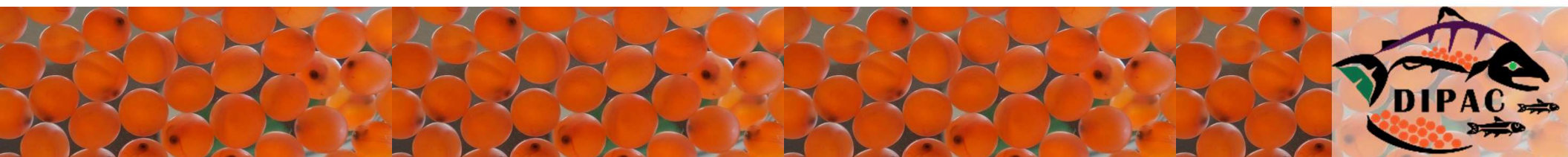
Brood Year	Age-3	Age-4
1992	212,239	2,304,001
1996	131,558	2,302,193
1999	135,742	2,203,037
2003	170,150	1,870,045
2002	211,832	4,410,059
2004	115,138	2,665,516
2007	116,213	3,432,837
2015	302,208	



# Predictable Age-3 & 4 Chum?

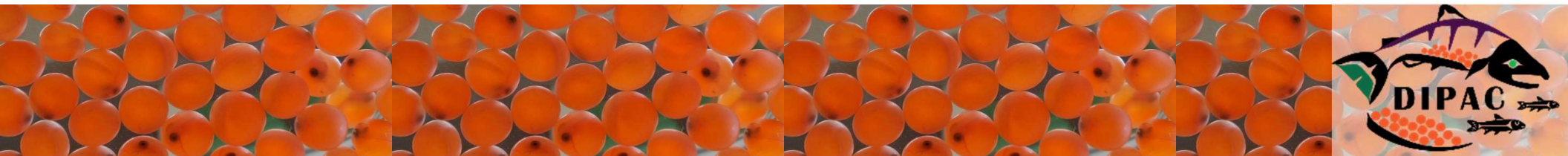
- Average Marine Survival (by, '96 – '14)
  - Age 3: .08%
  - Age 4: 1.96%
- Average Return (by, '96 – '14)
  - Age 3: 82,300
  - Age 4: 2 M

Brood Year	Age-3	Age-4
1992	212,200	2,304,000
1996	131,600	2,303,000
1999	135,700	2,203,000
2000	82,800	1,419,000
2003	170,200	1,870,000
2002	211,800	4,410,000
2004	115,100	2,666,000
2005	65,100	2,363,000
2007	116,200	3,433,000
2008	62,300	2,401,000
2009	85,000	3,082,000
2014	98,300	1,010,000
2015	302,200	1,571,000
2016	75,000	?



# What About Age-5 Chum

- Average proportion of run is ~30%
- Average return 862,800
- % of Forecast
  - 2019 – 48%
  - 2018 – 155%
  - 2017 – 160%
  - 2016 – 88%





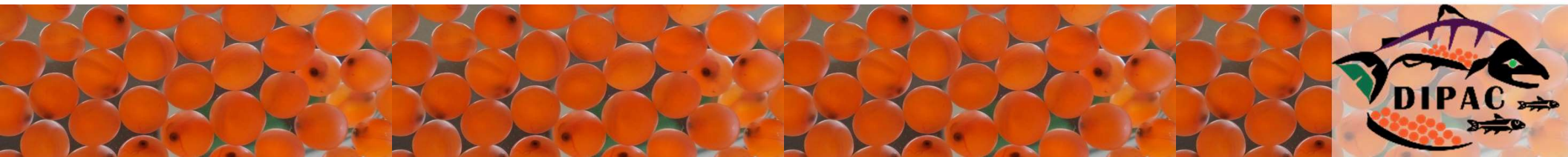
# Sockeye





# 2019 Sockeye Return: Totals by Age

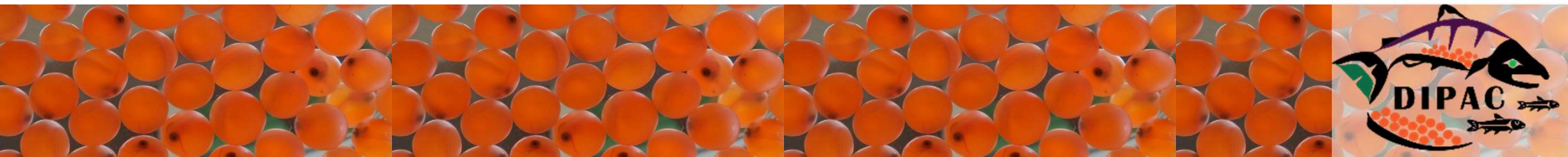
	Age-4	Age-5	Total
Actual:	60,600	63,700	124,300
Projected:	123,900	106,400	230,300
% of Projected:	49%	60%	54%



# 2019 Sockeye Return

	<b>Common Property</b>	<b>Cost Recovery</b>	<b>Broodstock<sup>1</sup></b>	<b>Total</b>
Actual:	<b>46,100</b>	<b>76,700</b>	<b>6,800</b>	<b>129,600</b>
Projected:	<b>114,000</b>	<b>109,500</b>	<b>6,800</b>	<b>230,300</b>
% of Projected:	<b>40%</b>	<b>70%</b>	<b>100%</b>	<b>56%</b>

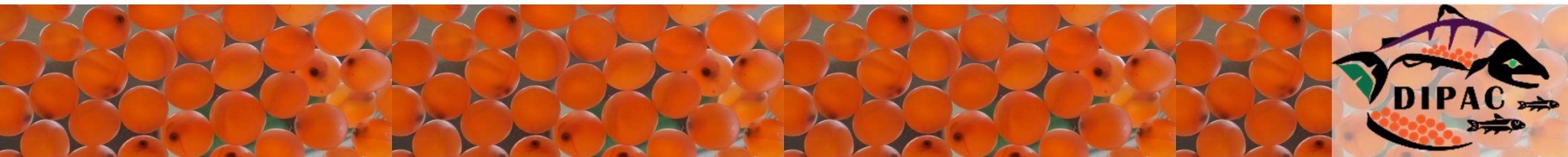
1) Includes end-of-season unmarketable fish.



# 2019 Sockeye Return:

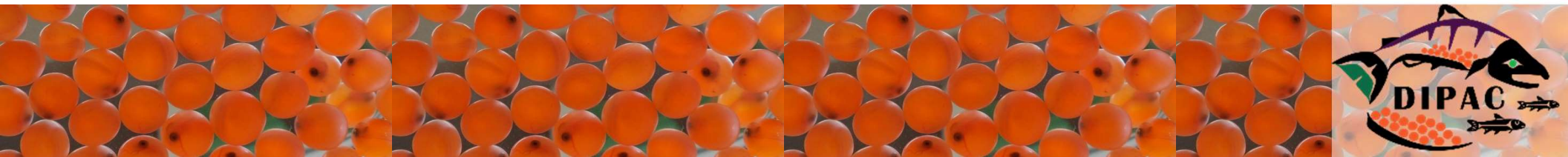
## Contribution, Cost Recovery, & Harvest Shares

	CP Harvest	DIPAC Contribution	Cost Recovery	Total Harvest
District 11 Gillnet	103,900	29,500	76,700	106,200
Other Gillnet	260,300	12,300		12,300
Seine	4,300	400		400
Personal Use	3,800	3,800		3,800
Broodstock				6,800
<b>Total</b>	<b>372,300</b>	<b>46,100</b>	<b>76,700</b>	<b>129,600</b>
Harvest Shares		38%	62%	

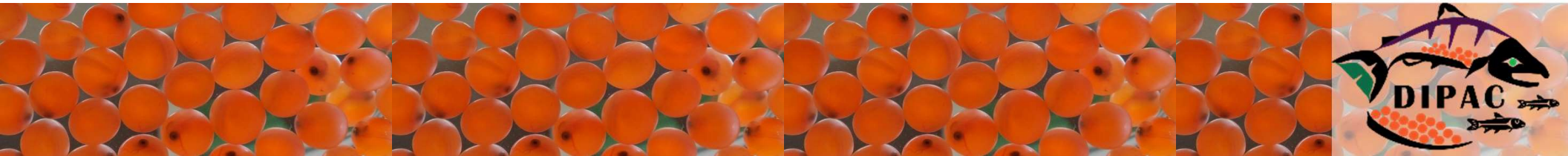
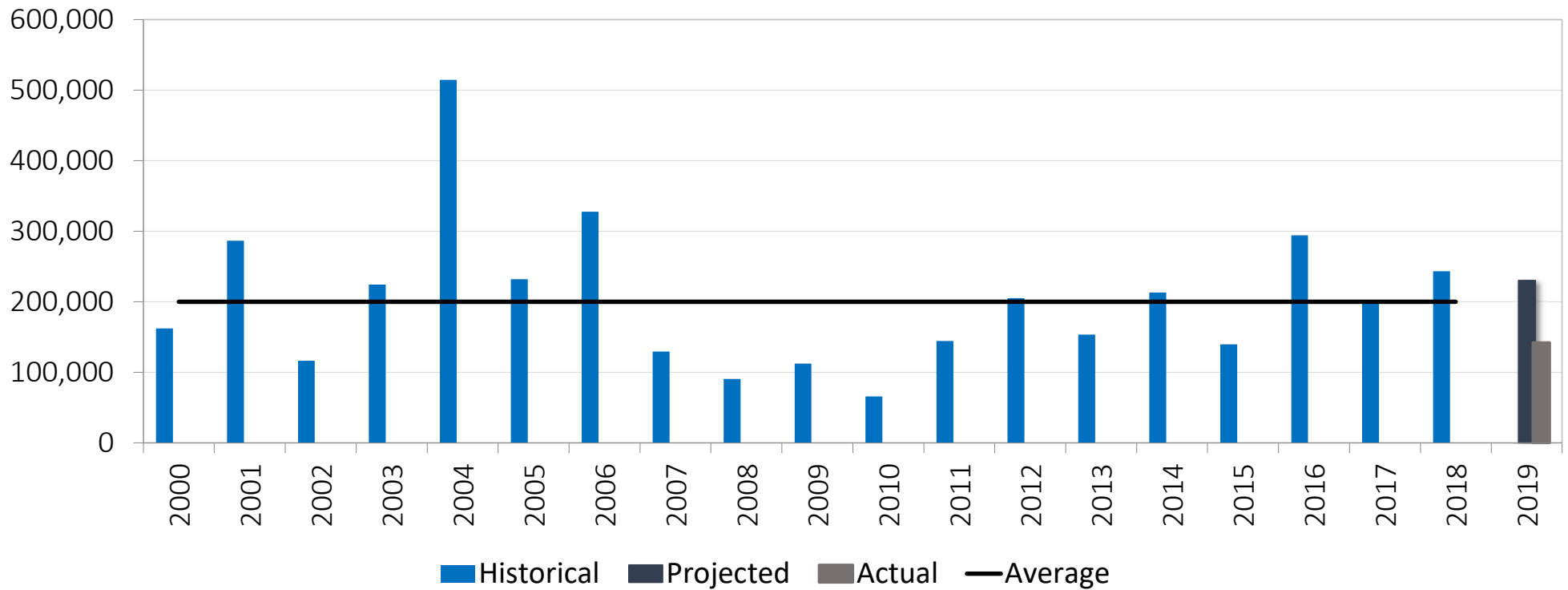


# Sockeye Marine Survival

Broodyear	Age 3	Age 4	Age 5	Age 6	Total
2013	0.1%	1.1%	0.3%	0.0%	1.5%
2014	0.2%	2.6%	0.8%		3.6%
2015	0.00%	0.8%			0.8%
2016	0.20%				0.2%



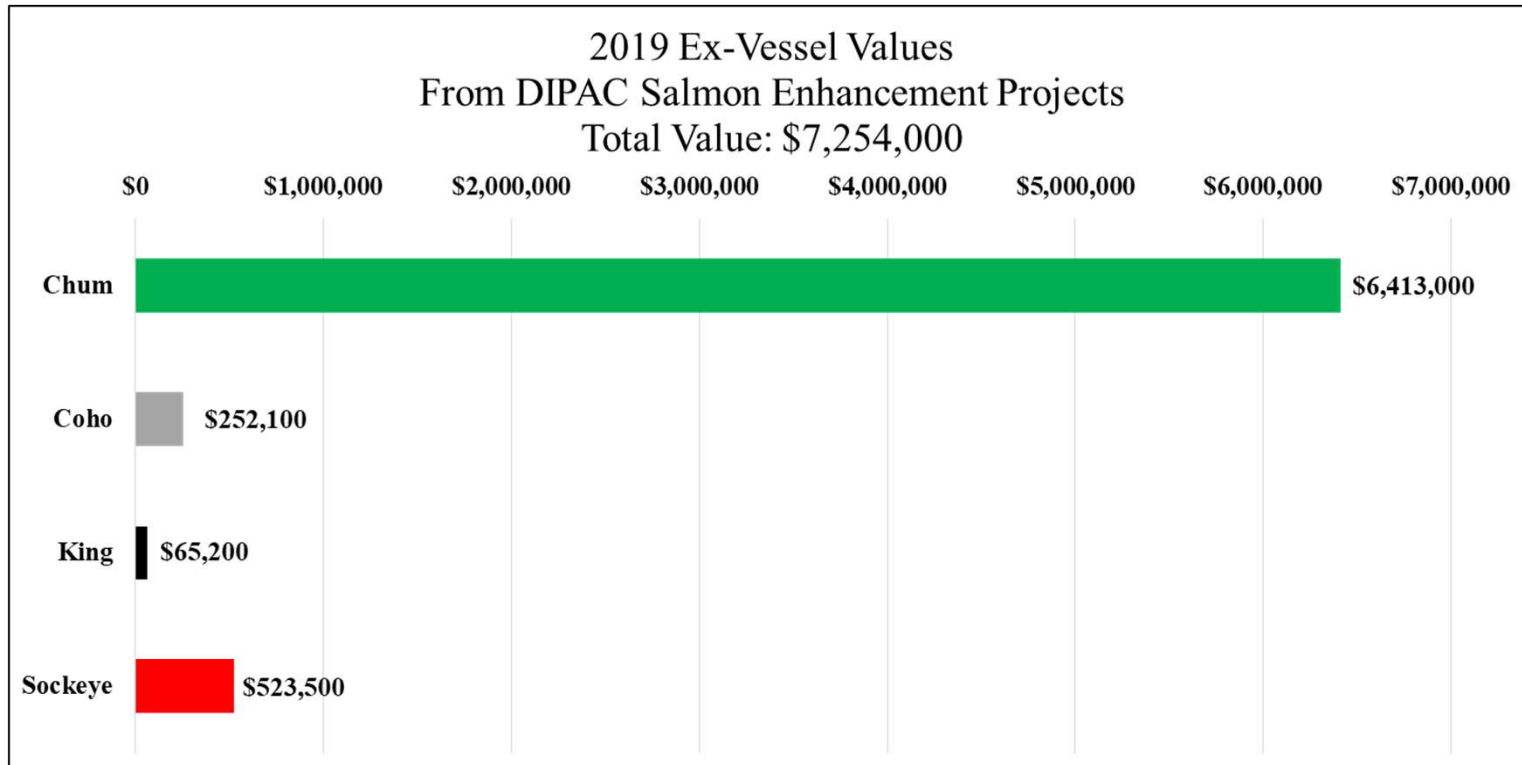
# 2019 Sockeye Return: Actual vs. Projected Return



## Estimated Value (\$) Contributions

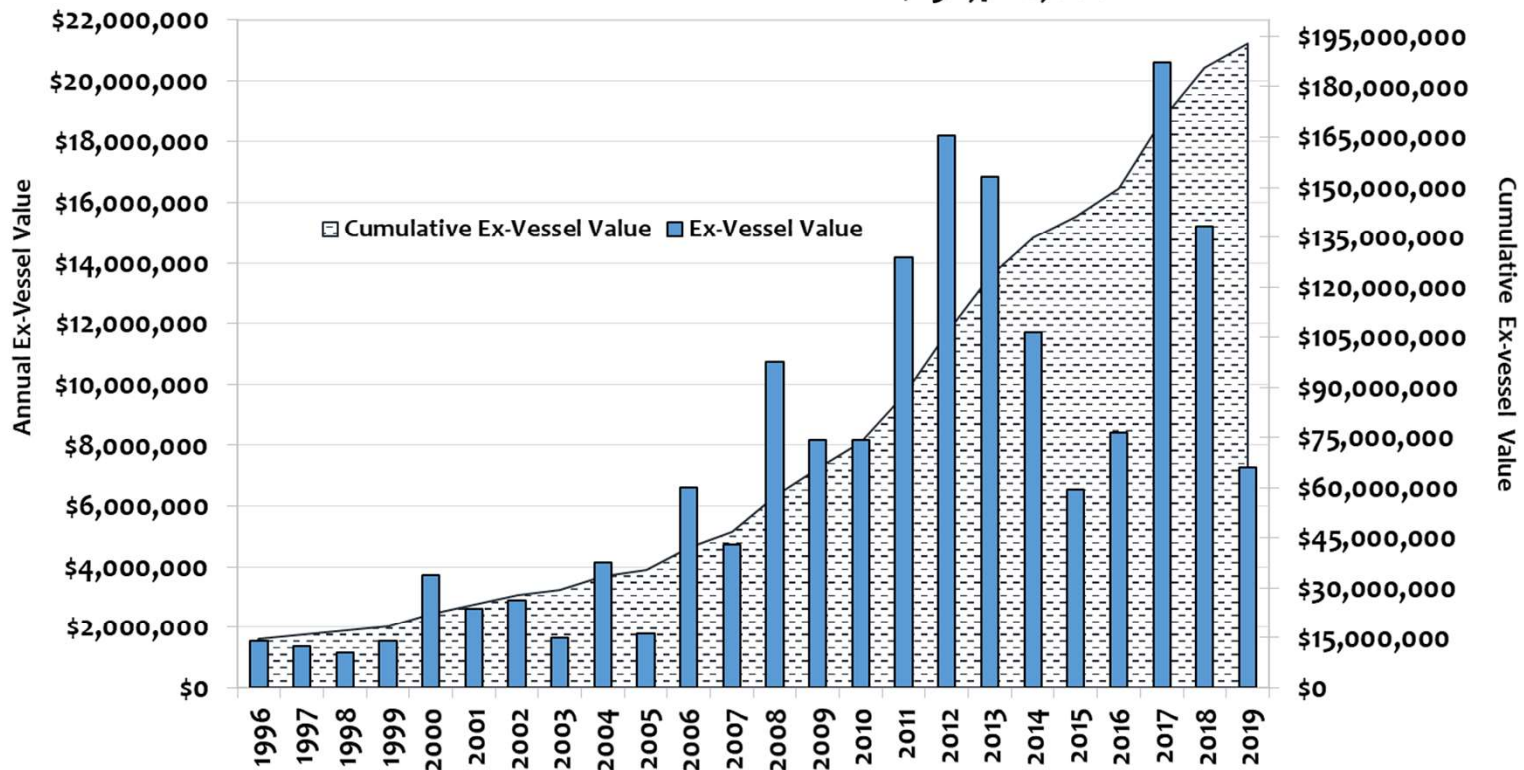
# 2019 Contributions

Estimated Ex-vessel Value: \$7,254,000



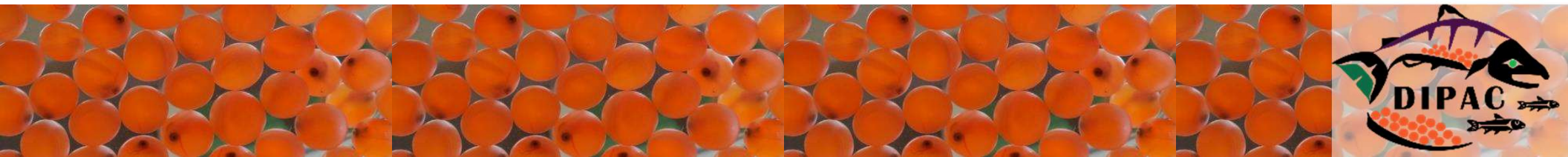
# DIPAC Salmon Contributions

Cumulative Ex-Vessel Value: \$192,780,000



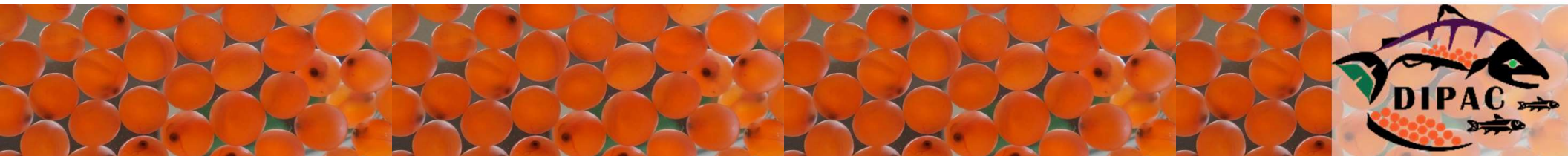


# 2020 Forecast



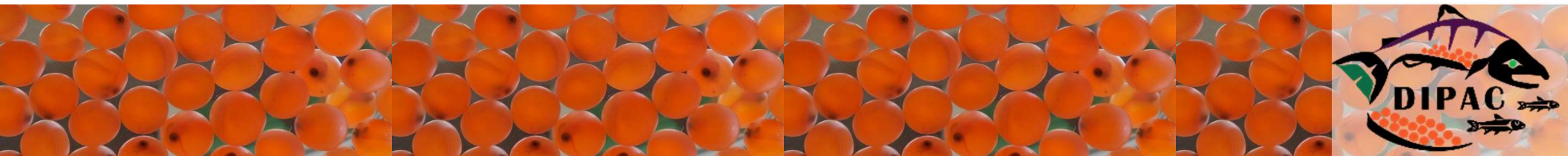
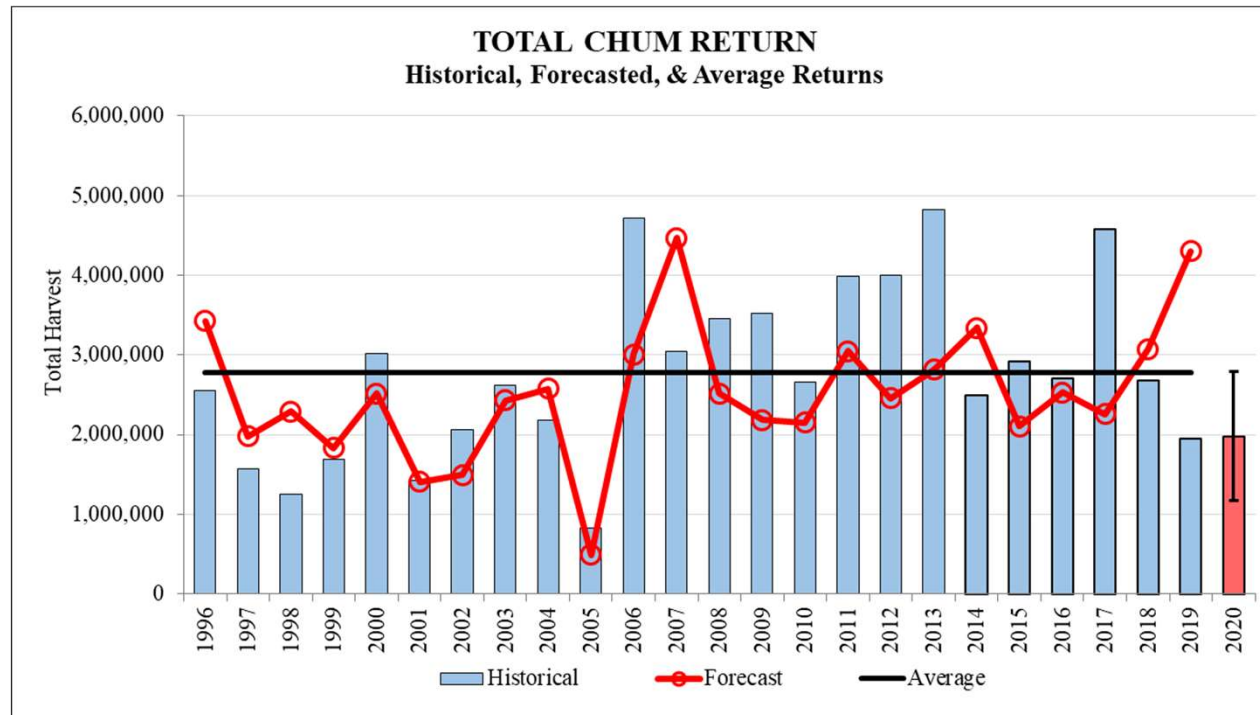
# 2020 Chum Forecast

	Low End	Mid Point	High End	Common Property	Cost Recovery	Brood
Taku/Stephens	526,100	<b>974,300</b>	1,423,000	517,300	267,000	<b>190,000</b>
Lynn Canal/ Amalga	644,400	<b>1,007,000</b>	1,369,000	736,500	270,400	
Total	1,171,000	<b>1,981,000</b>	2,792,000	1,254,000	537,400	



# 2020 Chum Forecast

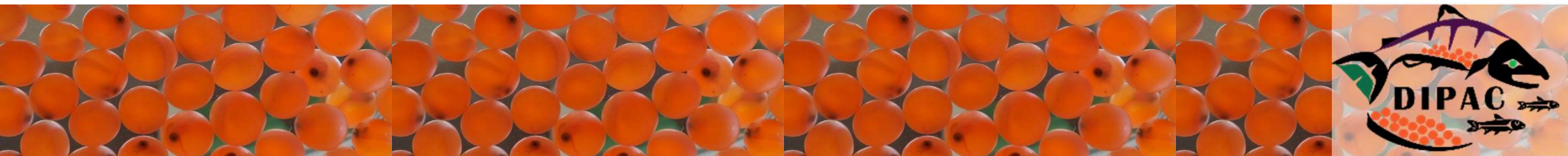
## Historical & Projected Returns



# 2020 Sockeye Forecast

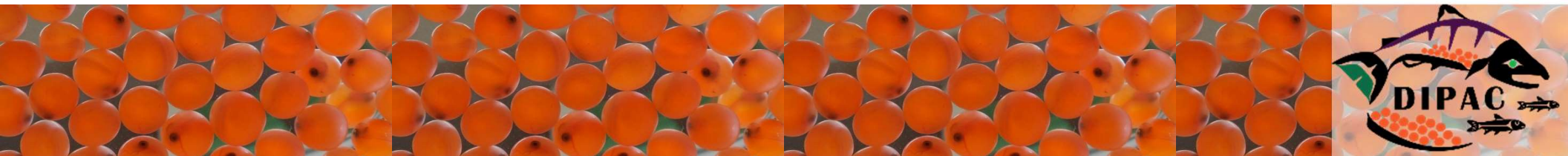
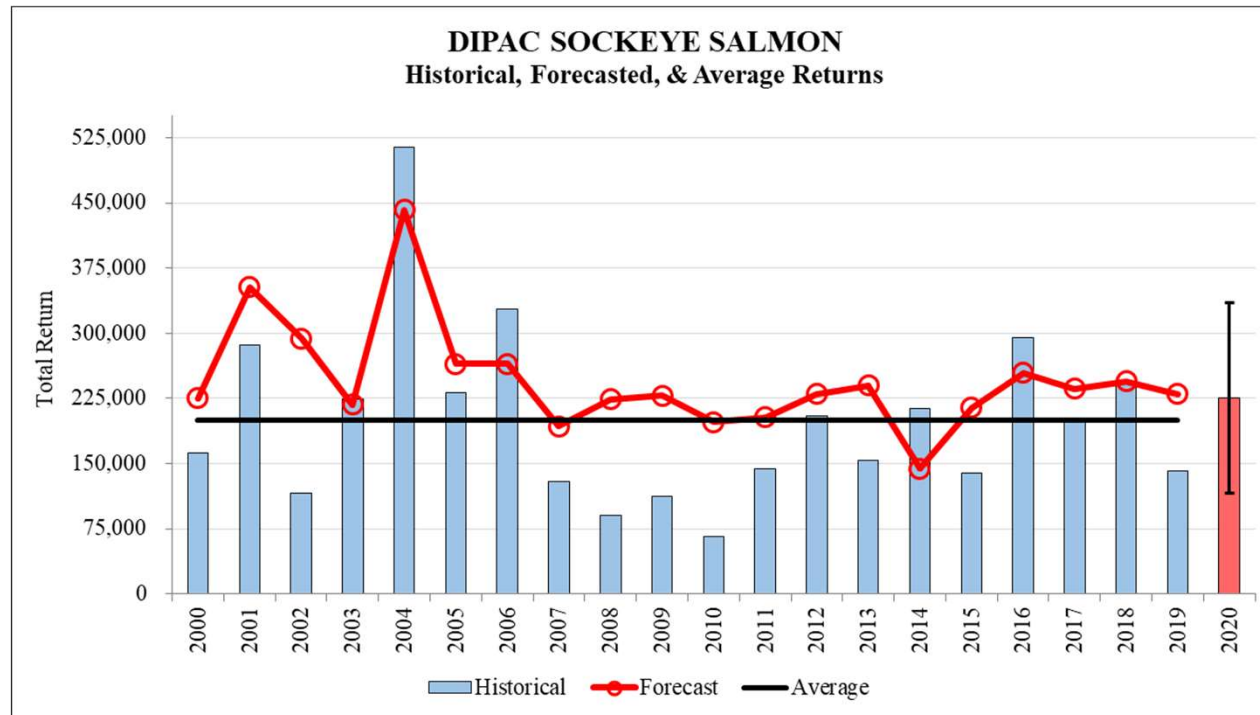
	Low End	Mid Point	High End
Age 5	33,200	<b>93,300</b>	153,300
Age 4	83,100	<b>132,600</b>	182,200
	116,300	<b>225,900</b>	335,500

Harvest Share Goal	Average Harvest Shares		
70% CP:	153,000	51% CP:	111,100
30% CR:	66,100	49% CR:	108,000
Broodstock:	6,800	Broodstock:	6,800



# 2020 Sockeye Forecast

## Historical & Projected Returns





Thank You.

