

Agenda Item E.1.f Supplemental Public Presentation 1 (Wolford) April 2018

2018 Salmon Cost - Benefit Assessment for California Recreational Fishermen



2018 CA Economic Assessment

From 2018 Preseason Rpt. II Table 10, page 59

					Community Income Impacts			
			Angle	rTrips		(dollars)		
		Estimates			Estimates			
		Based on the	2017	2013-2017	Based on the	2017	2013-2017	
Management Area	\Itemative	Options	Actual	Avg.	Options	Actual	Avg.	
OR/CA border to Hor		11,100	-	13,700	\$ 10,802,000	\$ 1,610,000	\$ 3,774,000	
KMZ	I	13,100			\$ 12,770,000			
		15,600			\$ 15,190,000			
Horse Mt. to Pt. Aren		8,700	4,700	12,200	\$ 3,607,000	\$ 1,938,000	\$ 3,340,000	
Ft Bragg	I	12,100			\$ 5,001,000			
		7,300			\$ 3,010,000			
Pt. Arena to Pigeon F		50,600	53,800	53,500	\$ 11,438,000	\$ 14,204,000	\$17,424,000	
SF	I	43,700			\$ 9,872,000			
		31,300			\$ 7,080,000			
South of Pigeon Pt.		31,100	15,100	19,200	\$ 7,035,000	\$ 1,361,000	\$ 5,633,000	
MO	I	21,800			\$ 4,930,000			
		19,000			\$ 4,289,000			

Yields recreational angler cost of roughly \$225 - \$975 per trip

April 2018



Fisheries Economics of the United States 2015, Economics and Sociocultural Status and Trends Series.

NOAA Technical Memorandum NMFS-F/SPO-170 May 2017

The Economic Contribution of Marine Angler Expenditures in the United States, 2011.

NOAA Technical Memorandum NMFS-F/SPO-134,September 2013

\$250 - \$300 per trip Ex-Vessel eq.

In Ca	alifornia in 2015	page 45 (63/2	257) of Fisheries	Economics of th	e United States,	201 5	
	number of coastal anglers	55 1,000					
	number of non-coastal anglers	152,000					
	number of CA anglers total		703,000				
	Nmber of trips (for hire)	727,000					
	Nmber of trips (private)	673,000					
	Number of trips total		1,400,000				
	Number or trips per ang	1.99					

In California in 2011: The Economic Contribution of Marine Angler Expenditures in the United States, 2011, NOAA Technical Memorandum NMFS-F/SPO-134 September 2013

Angler Per Trip Expense (Private Boat)

 Biel i el trip Expense (i i						
Category	Resid	lent \$				
Auto Fuel	\$	29 .52				
Bait	\$	16.84	Total pe	er CA ang	gler trip \$	
Boat Fuel	\$	35.26	\$	91.46		
lce	\$	3.69				
Parking and Site Access	Ş	6.15				

					Per	⁻ Trip	amoratizat	ion		
Anı	nual Durable Goods			2 pe	er y ear	5 pe	er year	10	per year	
	Tackle	\$	95.82	\$	47.91	\$	19.16	\$	9.58	
	Rods and Reels	Ş	128.48	\$	64.24	\$	25.70	\$	12.8 5	
	License Fees	\$	33.72	\$	16.86	\$	6.74	\$	3.37	
	New Boat Purchase	Ş	36.83	\$	18.42	\$	7.37	\$	3.68	
	New Accessory Purchase	\$	21.1 5	\$	10.58	\$	4.23	\$	2.12	
	Boat Insurance	Ş	22.83	\$	11.42	\$	4.57	\$	2.28	
	Boat Maintenance	\$	47.66	\$	23.83	\$	9.53	\$	4.77	
	Boat Registration	\$	5. 9 5	\$	2.98	\$	1.19	\$	0.60	
	Boat Storage	\$	83.34	\$	41.67	\$	16.67	\$	8.33	
	Boat Purchase Fees	\$	1.47	\$	0.74	\$	0.29	\$	0.15	
	Total			Ş	238.63	\$	95.45	Ş	47.73	
	Per Angler expense p	er	trip	\$	330.09	\$1	L86.91	\$:	139.19	



2018 CA Economic Assessment

2018 Preseason Rpt. II Table 10 assuming \$300 per trip

			and the second se				
		Estimates			Estimates		
		Based on the	2017	2013-2017	Based on the	2017	2013-2017
Management Area	Alternative	Options	Actual	Avg.	Options	Actual	Avg.
OR/CA border to Ho	I	11,100	_	13,700	\$ 3,330,000	\$ -	\$ 4,110,000
KMZ	I	13,100			\$ 3,930,000		
	III	15,600			\$ 4,680,000		
Horse Mt. to Pt. Aren		8,700	4,700	12,200	\$ 2,610,000	\$ 1,410,000	\$ 3,660,000
Ft Bragg	I	12,100			\$ 3,630,000		
	III	7,300			\$ 2,190,000		
Pt. Arena to Pigeon F		50,600	53,800	53,500	\$15,180,000	\$16,140,000	\$16,050,000
SF	I	43,700			\$13,110,000		
	III	31,300			\$ 9,390,000		
South of Pigeon Pt.	<u> </u>	31,100	15,100	19,200	\$ 9,330,000	\$ 4,530,000	\$ 5,760,000
MO		21,800			\$ 6,540,000		
	III	19,000			\$ 5,700,000		



2018 Impact to California Recreational Anglers

Alternative I

- 101,500 trips total, \$30.5 million
- 3% above the 2013 2017 average

Alternative II

- 90,700 trips total, \$27.2 million
- Loss of \$3.2 million (11%) from Alt I
- 8% below the 2013 2017 average
- Alternative III
 - 73,200 trips total, \$22.0 million
 - Loss of \$8.5 million (28%) from Alt I
 - 26% below the 2013 2017 average

Based on \$300 per angler trip



2018 Impact to SF and MO Recreational Anglers

- Alternative I
 - 81,700 trips total, \$24.5 million
 - 12% above the 2013 2017 average
- Alternative II
 - 65,500 trips total, \$19.7 million
 - Loss of \$4.9 million (20% loss) from Alt I
 - 10% below the 2013 2017 average
- Alternative III
 - 50,300 trips total, \$15.1 million
 - Loss of \$9.4 million (38% loss) from Alt I
 - 31% below the 2013 2017 average

Based on \$300 per angler trip



Benefits are Difficult to Quantify

• Alternative I – 151,000 Escapees – Predicted time to recovery is unknown • Alternative II – 165,000 Escapees – Predicted time to recovery is unknown Alternative III – 180,000 Escapees – Predicted time to recovery is unknown



Escapement History of prior years that have failed to meet minimum escapement of 122,000

year	escape(t-3)	escape(t)	escape(t+3)
1983	?	110.2	240.1
1990	195.1	105.1	165.6
1991	227.5	118.9	295.3
1992	152.6	81.5	301.6
2007	286.9	91.4	124.3
2008	396	65.4	119.3
2009	275	40.9	285.4
2015	285.4	112.9	?
2016	406.2	89.7	?
2017	212.5	44.6	?

Were they the result of a low parental year class – never

Did their spawning year class fail to meet escapement – only once (2008 +3 2011)

Mean spawner escapement from these "missed" years ~240K



Cost / Benefit Trade is Unknown

- Lost economic benefit from Alt I of \$5 to \$10 million in SF and MO regions is known and quantifiable
- Benefit to recovery is <u>unknown</u> and not quantifiable
- Lack of quantifiable benefit does not support the loss of economic benefit
 No justification to support Alternatives II or III



Escapement of 151,000 adults is Conservative

 151,000 is in the upper half of the FMP escapement range

- Meets the NMFS Guidance
- Provides an *expectation* of a higher than normal spawning class
 - Poor correlation between escapement numbers and returning adults in the spawning year class
 - River and delta habitat, and Ocean conditions dominate
 - Historic data suggest returns from this spawning year class will range between 40,000* and 770,000* adults
 Average adult escapement is 240,000



2018 Salmon Assessment for California Recreational Fishermen

Questions