

LOUISIANA DEPARTMENT OF
WILDLIFE AND FISHERIES
OFFICE OF FISHERIES

Tab F, No. 4(d)



LA CREEL SURVEY

LA CREEL SURVEY

How Did We Get Where We Are Today?

- Louisiana has been involved with MRFSS/MRIP since the early 1980's
- LDWF began collecting MRFSS in the late 1990's
- Throughout this time LDWF found several issues with the survey
 - Inability to obtain reliable landings at a basin or sub-state level
 - Insufficient biological samples (CPUE, size frequency, age data, etc.)
 - Angler participation estimates far exceeded recreational licenses
 - Precision of landings estimates for many species was poor
 - Landing estimates not timely enough to monitor in-season quotas

LA CREEL SURVEY

How Did We Get Where We Are Today?

- In 2012 Louisiana proposed a Regional Management approach for managing the red snapper recreational fishery – That prompted us to develop an intensive red snapper landings survey in 2013
- Louisiana dropped its participation in the MRIP survey and began **LA Creel** on January 1, 2014

LA CREEL SURVEY
How Did We Get Where We Are Today?

- LDWF requested MRIP Certification January 7, 2015
- LA Creel Peer Review – June 2-3, 2015
- Side-by-side surveys in 2015 for purposes of Benchmarking
- Benchmarking evaluation and provisional MRIP certification in 2016

LA Creel Survey

PURPOSE

To provide *statistically significant* recreational fishery information to aid in management of *Louisiana's valuable fishery resources*. The saltwater component of the recreational fishery encompasses state waters including marsh habitat, bays, beaches and nearshore areas as well as the offshore federally managed waters of the EEZ.

LA Creel Survey

Design Criteria

- Increase the speed with which harvest data can be compiled into landings summaries
- Create a flexible design able to quickly respond to changing needs
- Provide information on area-specific harvest for all species landed by anglers
- Maximize survey efficiency and minimize burden on anglers

LA Creel Survey

General Methodology

Recreational landings are estimated separately for the private recreational and for-hire sectors

- An access-point survey to collect harvest rate
- A phone/email survey to estimate total effort

Separate biological sampling from LA Creel recreational landing survey

Key Features of LA Creel

- Inshore/Offshore site stratification
- Recreational offshore landing permit (ROLP)
- Separate biological sampling program
- Weekly landing estimates

2015 LA Creel Landing Data

Why Separate Offshore And Inshore Fishing Activity?

OFFSHORE SPECIES

Red Snapper	106,429
Gray Snapper	101,355
Dolphin	59,964
Spotted Seatrout	39,901
Blackfin Tuna	24,924
Yellowfin Tuna	22,288
Sand Seatrout	20,459
Greater Amberjack	10,954

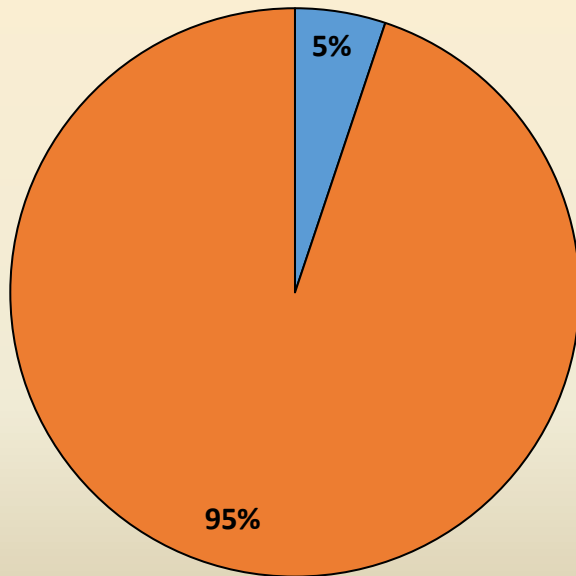
INSHORE SPECIES

Spotted Seatrout	4,257,931
Red Drum	1,237,953
Sand Seatrout	345,725
Sheepshead	251,924
Black Drum	218,184
Southern Flounder	215,632
Atlantic Croaker	206,856
Gafftopsail Catfish	75,366

2015 LA Creel Effort Data

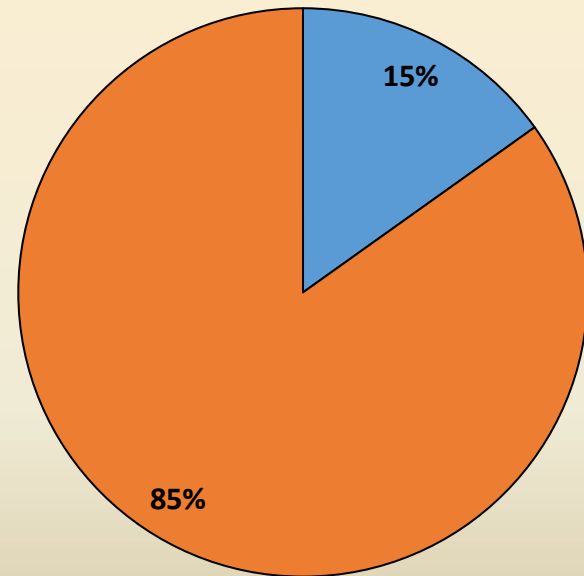
Why Separate Offshore And Inshore Fishing Activity?

2015 LA CREEL - AREA FISHED
(Private Angler)



■ Offshore (> 3 mi) ■ State Waters (< 3 mi)

2015 LA CREEL - AREA FISHED
(Charter)



■ Offshore (> 3 mi) ■ State Waters (< 3 mi)

LA Creel Effort Data

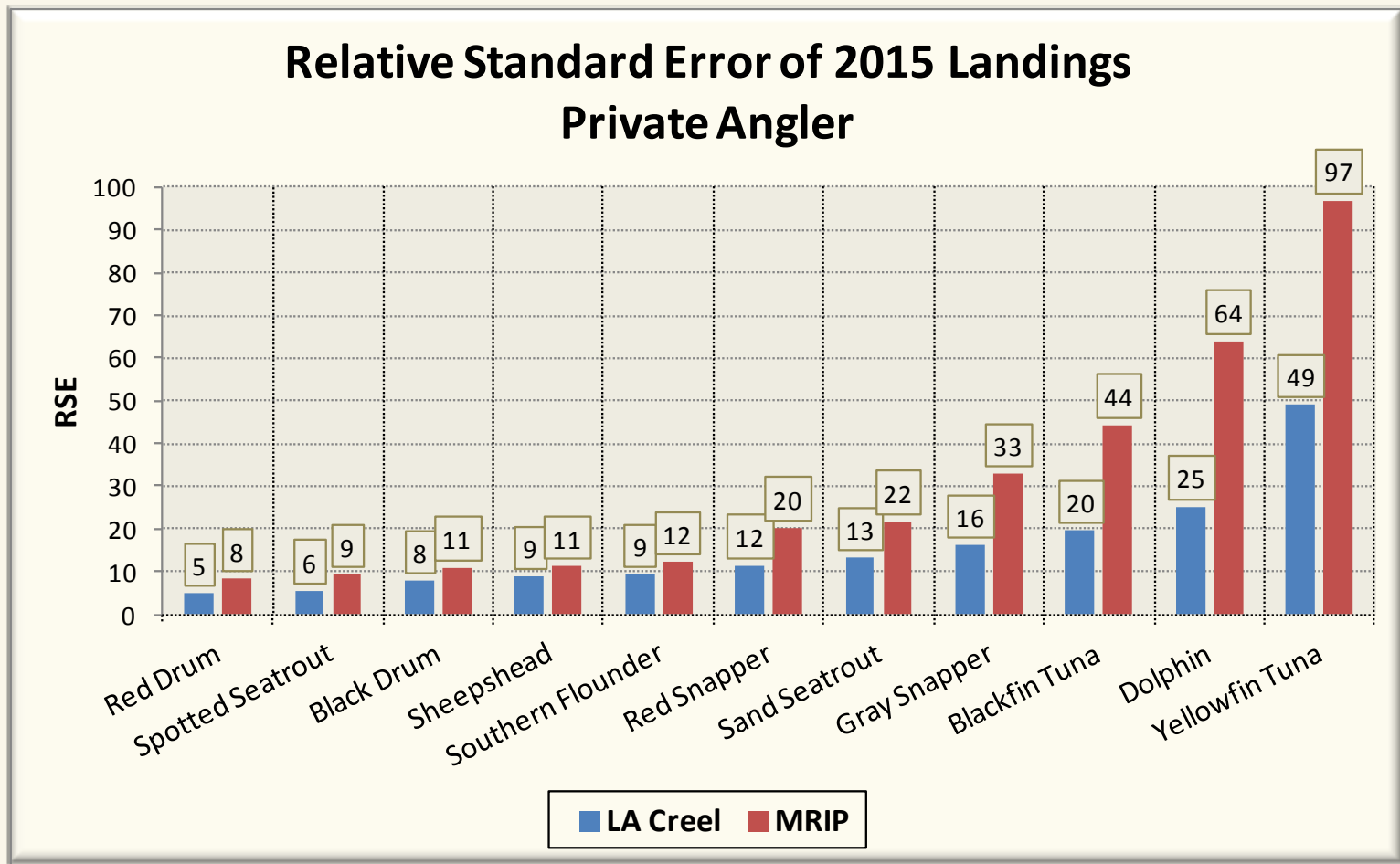
Weekly Draw

PRIVATE ANGLER WEEKLY DRAW		
REGION	# DRAWN	# IN FRAME
ROLP	* 400	19,220
Out-Of-State	300	443,966
Louisiana Resident		
North	300	
Southeast	300	
Southwest	300	
TOTAL	1,600	463,186
* 800 RED SNAPPER EEZ SEASON		

CHARTER/FOR-HIRE WEEKLY DRAW		
	% DRAWN	# IN FRAME
ROLP	* 30%	155
Non-ROLP	10%	741
TOTAL		896
* 100% OF ROLP DRAWN DURING RED SNAPPER EEZ SEASON		

MODE	Dockside Trips Surveyed		Effort Survey Contacts	
	2015	2016	2015	2016
CHARTER BOAT	1,718	1,427	2,449	3,650
PRIVATE/SHORE	9,113	8,601	40,895	42,392
TOTAL	10,831	10,028	43,344	46,042

Benefits to Stratified Offshore Sites & ROLP



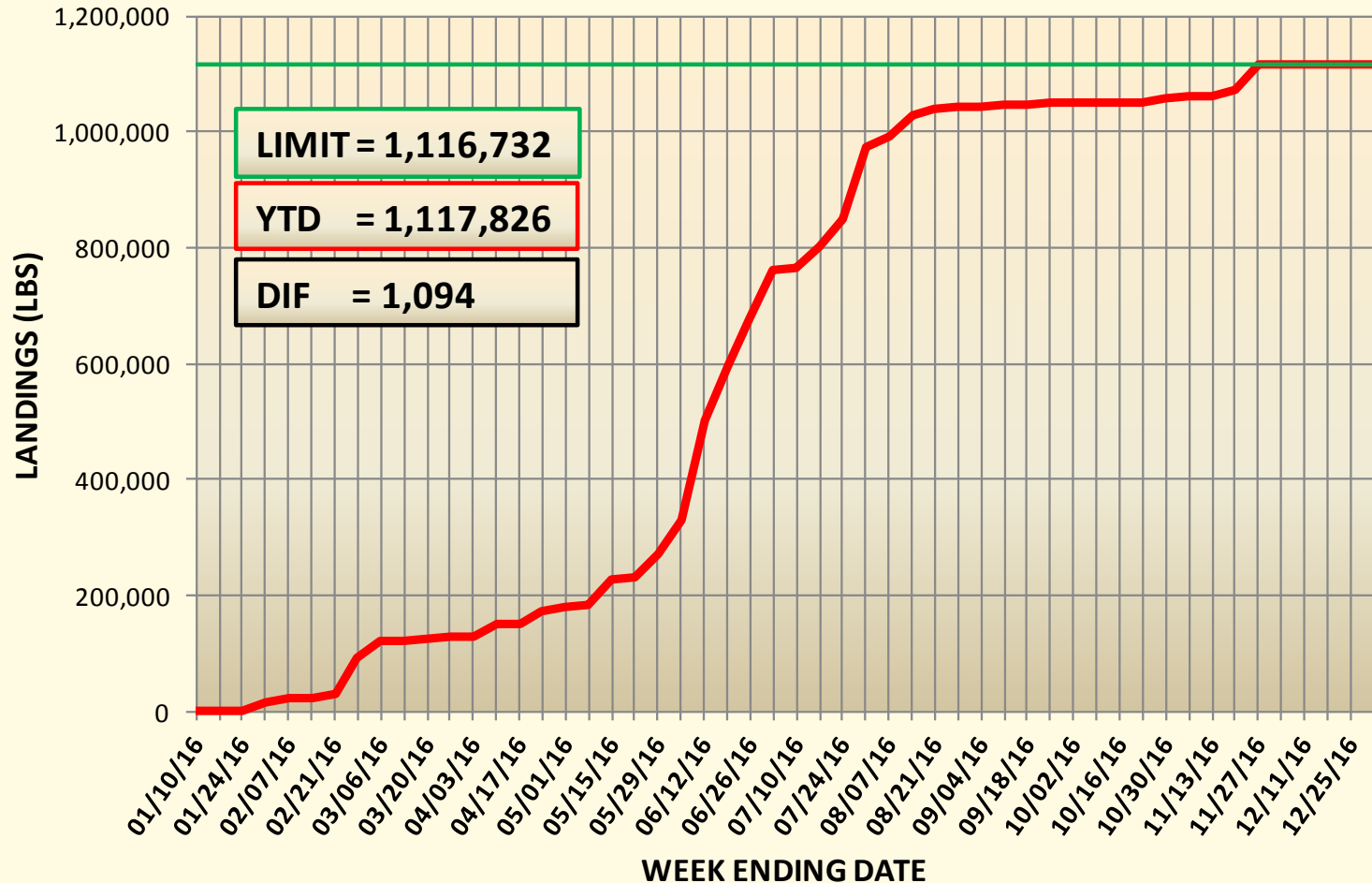
Red Snapper Biological Samples

LENGTH MEASUREMENTS TAKEN	PRIVATE ANGLER			CHARTER			TOTAL		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
LOUISIANA - BIOLOGICAL SAMPLING	1,049	679	556	363	582	544	1,412	1,261	1,100
MRIP - MISSISSIPPI	30	33	102	12	50	90	42	83	192
MRIP - ALABAMA	275	191	234	179	334	391	454	525	625
MRIP - FLORIDA	480	266	339	214	429	538	694	695	877

WEIGHT MEASUREMENTS TAKEN	PRIVATE ANGLER			CHARTER			TOTAL		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
LOUISIANA - BIOLOGICAL SAMPLING	668	555	485	268	513	381	936	1,068	866
MRIP - MISSISSIPPI	30	33	60	12	50	84	42	83	144
MRIP - ALABAMA	261	187	199	160	333	400	421	520	599
MRIP - FLORIDA	477	260	338	213	429	538	690	689	876

Near Real Time Weekly Monitoring

LOUISIANA'S 2016 RED SNAPPER LANDING ESTIMATES
(LA CREEL - ALL RECREATIONAL SECTORS)



LA CREEL SURVEY BENEFITS

- Offshore and Inshore Strata provides more representative and precise landing estimates
- Saltwater licensed anglers and ROLP permittees surveyed for effort results in greater precision and provides efficiency in collection of estimates
- Near real-time estimates (weekly) provides timely management information
- Increased estimate precision provides confidence in estimates
- Basin level estimates provides regional management options
- Flexible and efficient survey design
- Representative biological samples by separating biological sampling from creel survey

QUESTIONS ?

LA Creel Access Point Survey

SITE FRAME - ACTIVITY

Private Angler Inshore Weekday & Weekend
Private Angler Offshore Weekday & Weekend
Charter Inshore Weekday & Weekend
Charter Offshore Weekday & Weekend

WEEKLY SITE ASSIGNMENTS

(Site Selection Based on Proportional Probability)

AREA FISHED

Pontchartrain Basin
Barataria Basin
Terrebonne/Timbalier Basin
Vermilion/Teche Basin
Calcasieu/Sabine Basin
Offshore

Random Selection of Shift (AM/PM)

SITE ASSIGNMENTS DISTRIBUTED TO

CSA'S

LA Creel Effort Survey

PRIVATE ANGLER FRAME (Weekly)

(Random Draw of Licensed Anglers)

400 - ROLP

1,200 - NON-ROLP

300 - SW Anglers North Region

300 - SW Anglers Southeast Region

300 - SW Anglers Southwest Region

300 - SW Out-Of-State

PHONE/EMAIL SURVEY

(Contracted to SCPDC)

CHARTER FRAME

(Weekly)

(Random Draw of Licensed Charter Captains)

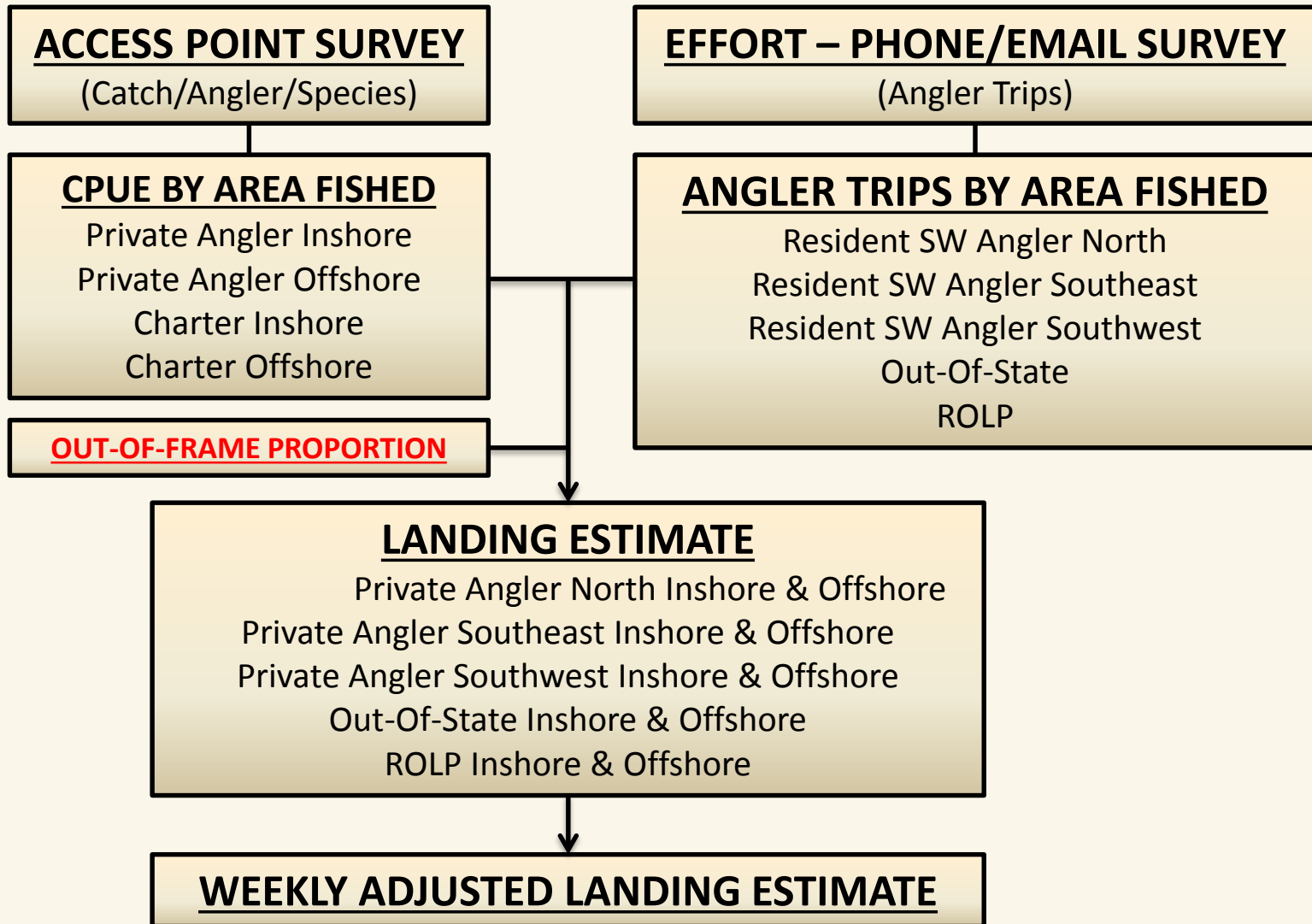
30% - ROLP

10% - NON-ROLP

PHONE/EMAIL SURVEY

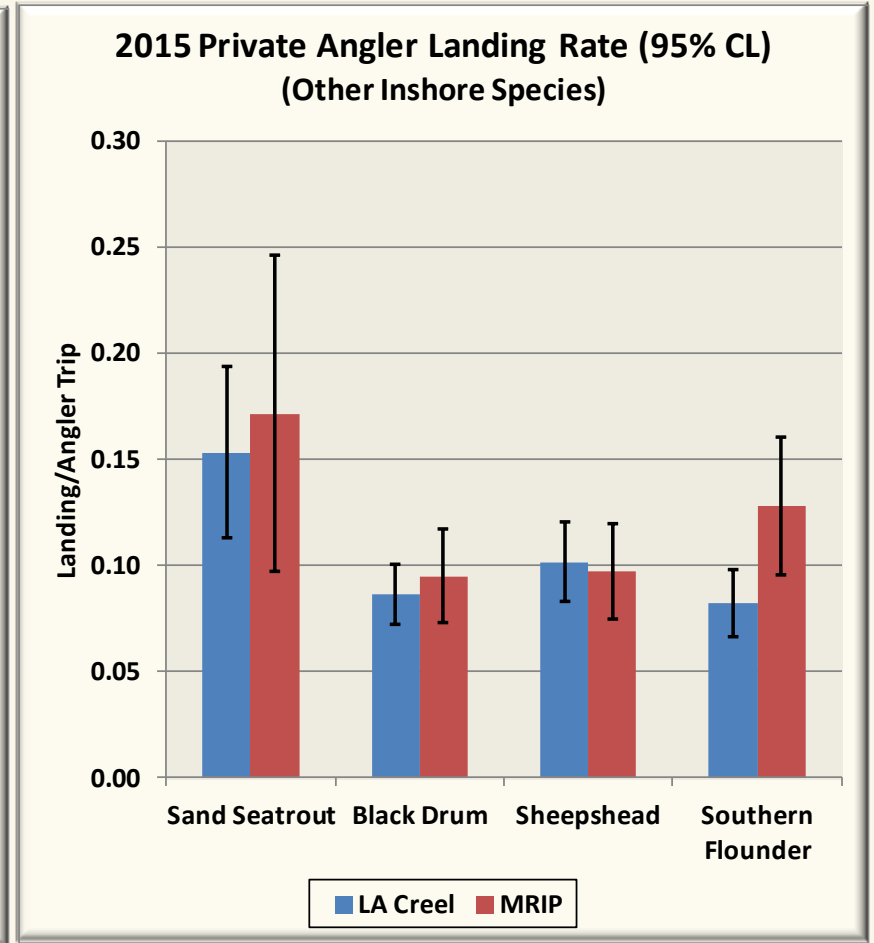
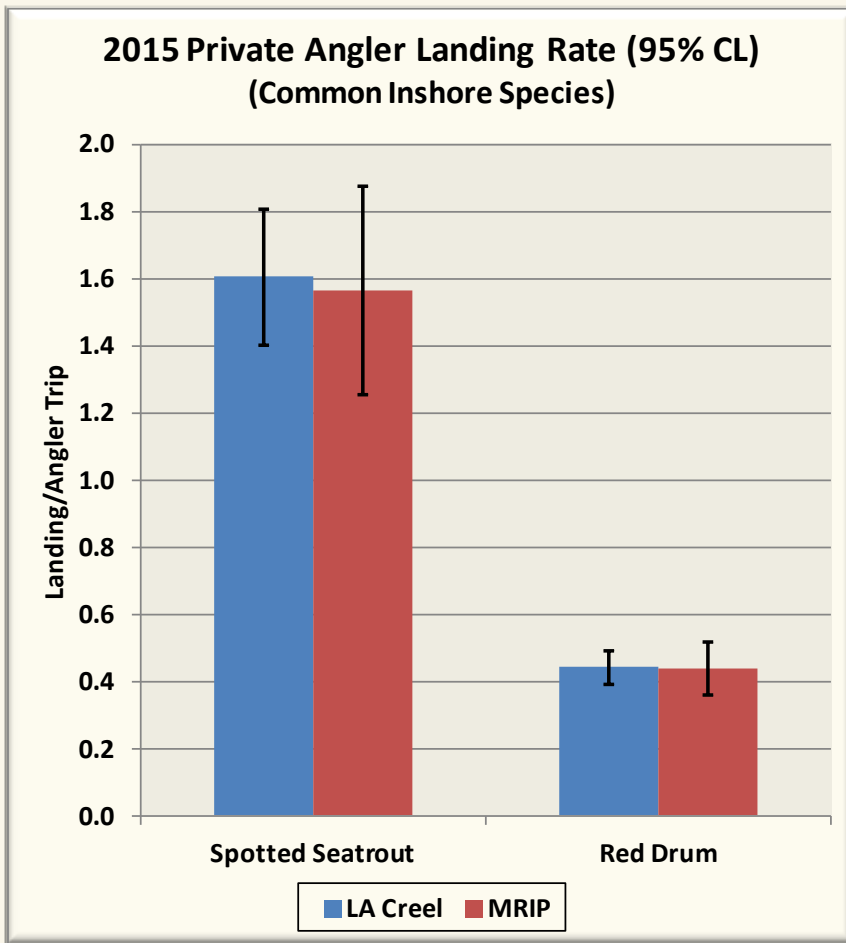
(Collected by CSA Personnel)

LA Creel Landing Estimate Calculation



Inshore Species

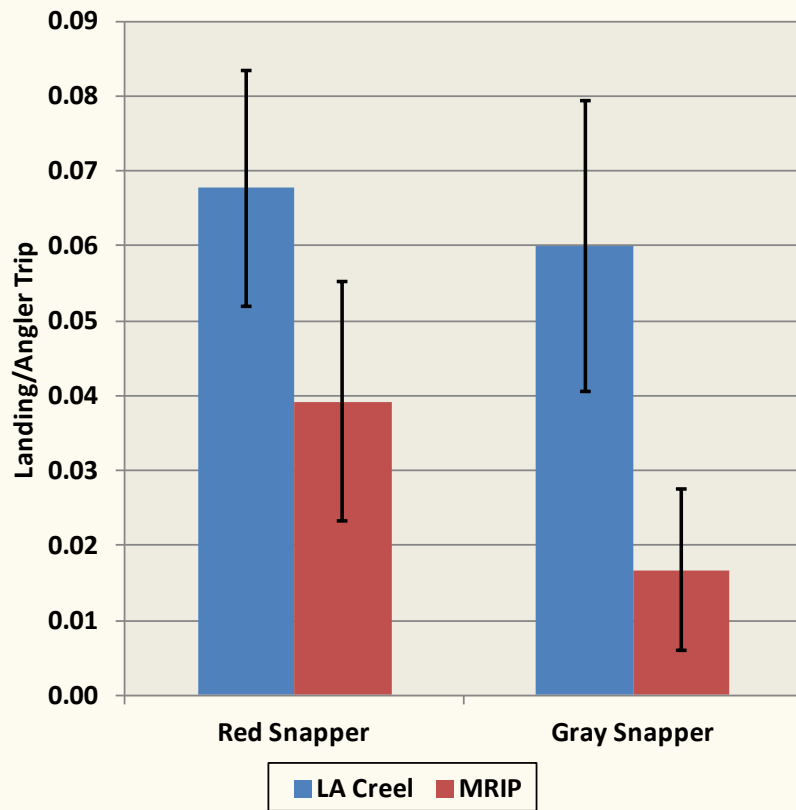
2015 Benchmarking



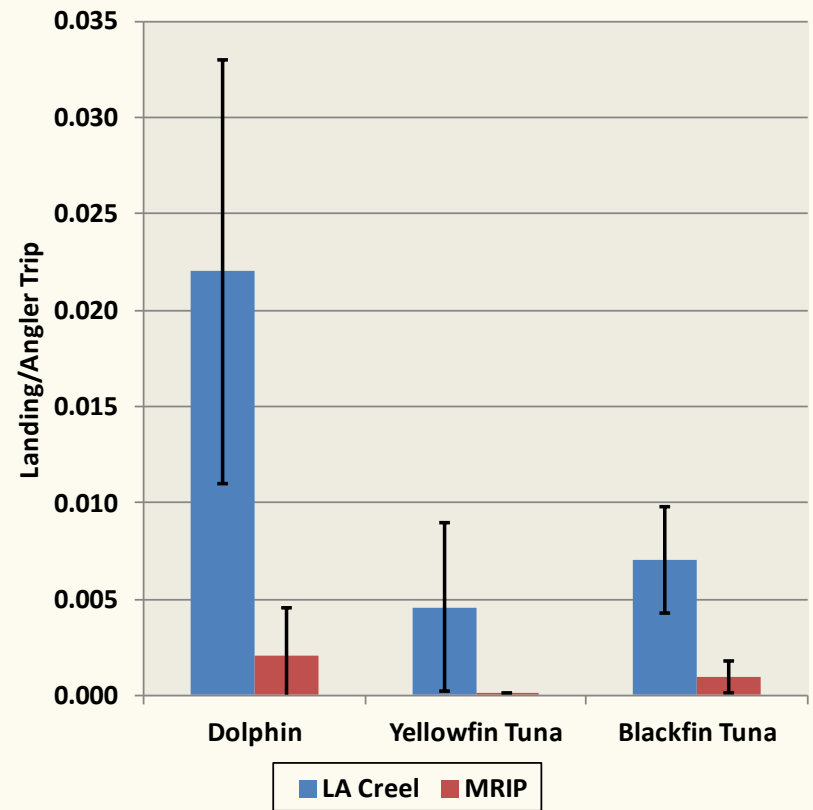
Reef Fish & Highly Migratory Species

2015 Benchmarking

2015 Private Angler Landing Rate (95% CL)
(Offshore Reef Fish Species)

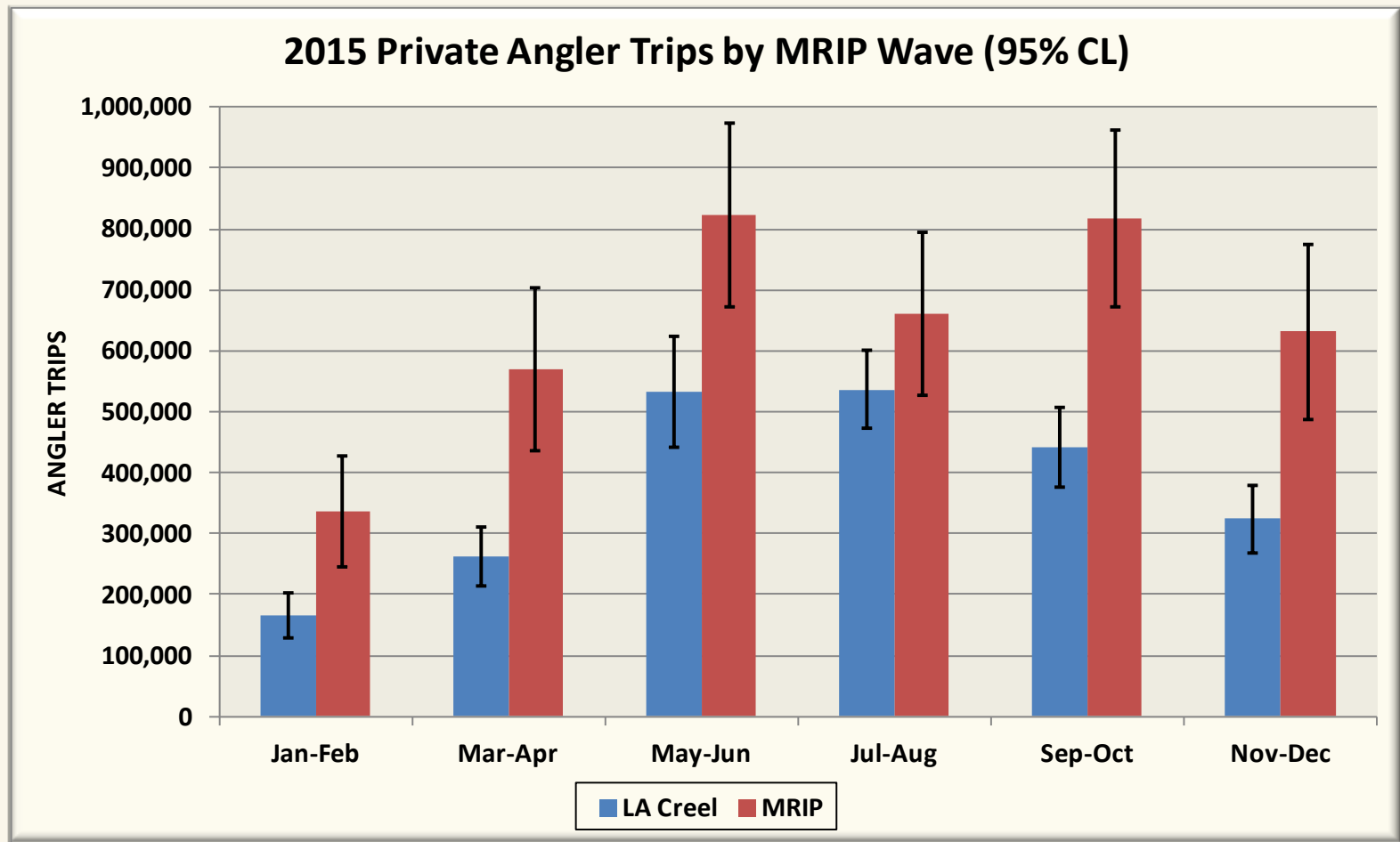


2015 Private Angler Landing Rate (95% CL)
(Offshore Highly Migratory Species)



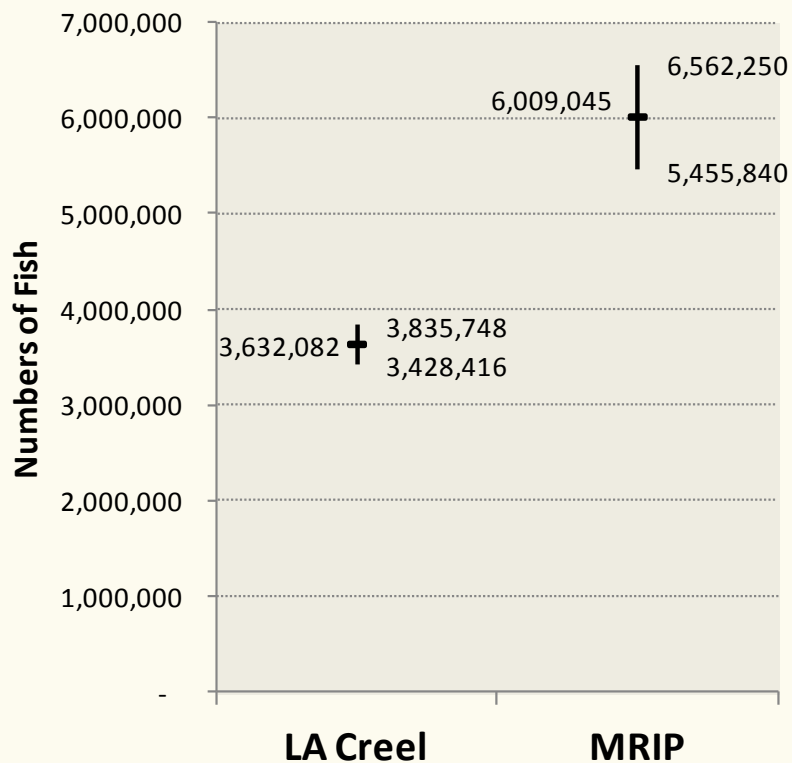
Comparison of LA Creel to MRIP Angler Trips

2015 Benchmarking

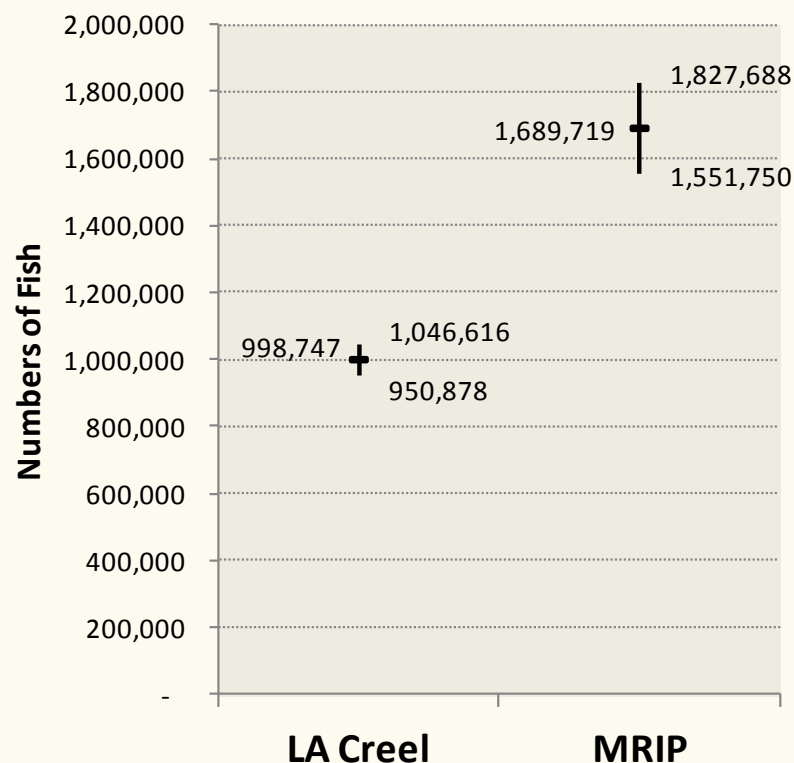


Inshore Species 2015 Benchmarking

2015 Spotted Seatrout Landings Private Angler



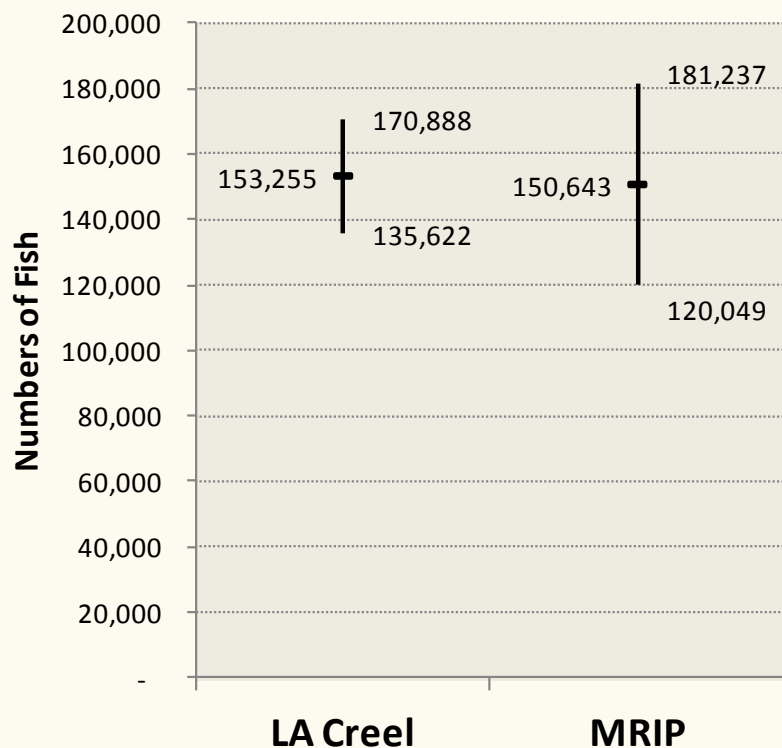
2015 Red Drum Landings Private Angler



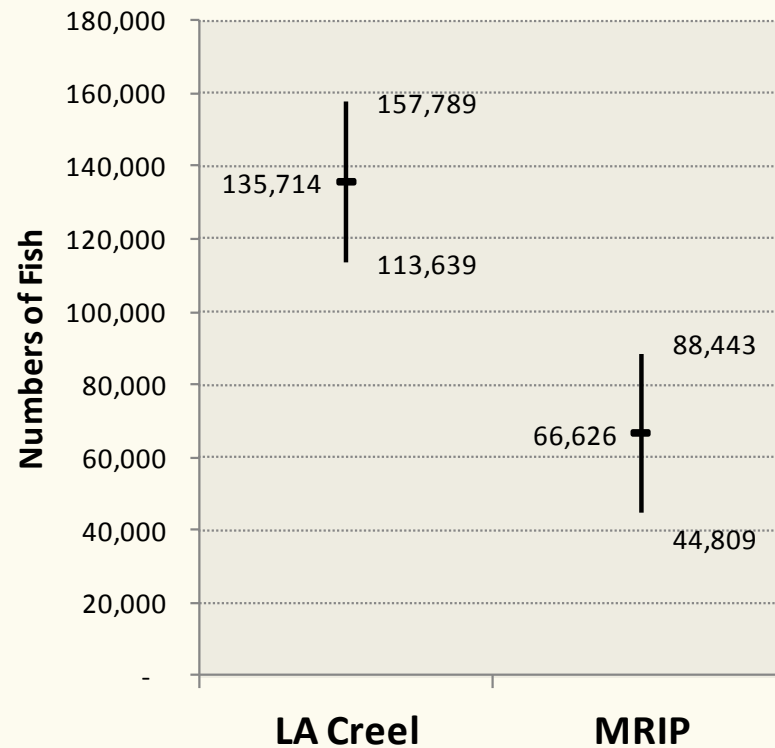
Reef Fish Species

2015 Benchmarking

2015 Red Snapper Landings Private Angler



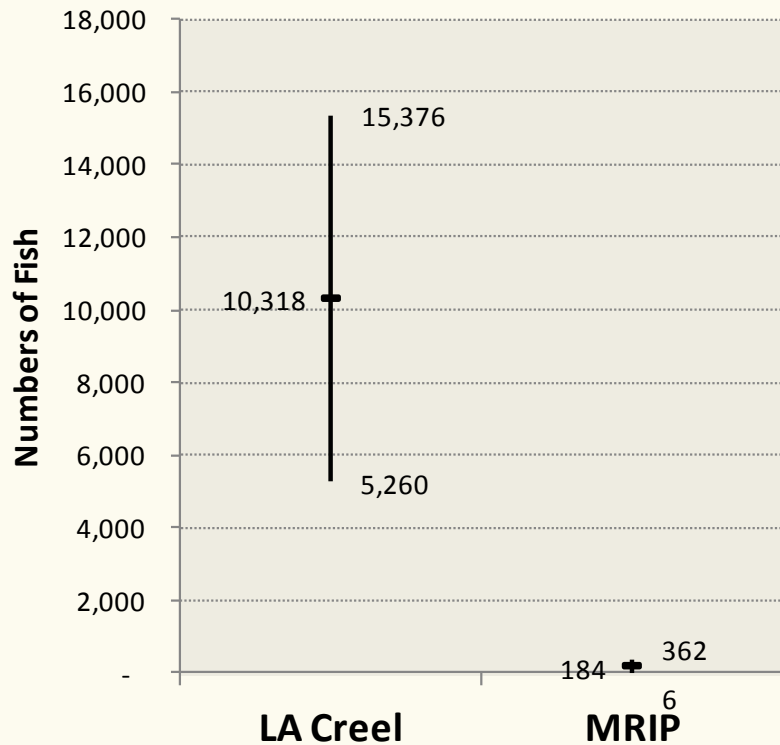
2015 Gray Snapper Landings Private Angler



Highly Migratory Species

2015 Benchmarking

2015 Yellowfin Tuna Landings Private Angler



2015 Blackfin Tuna Landings Private Angler

