

NORTH CAROLINA DIVISION OF MARINE FISHERIES

“Mail Surveys: Saltwater Recreational Activities”

Collecting data on activities not traditionally included in telephone and intercept surveys

April 21, 2012



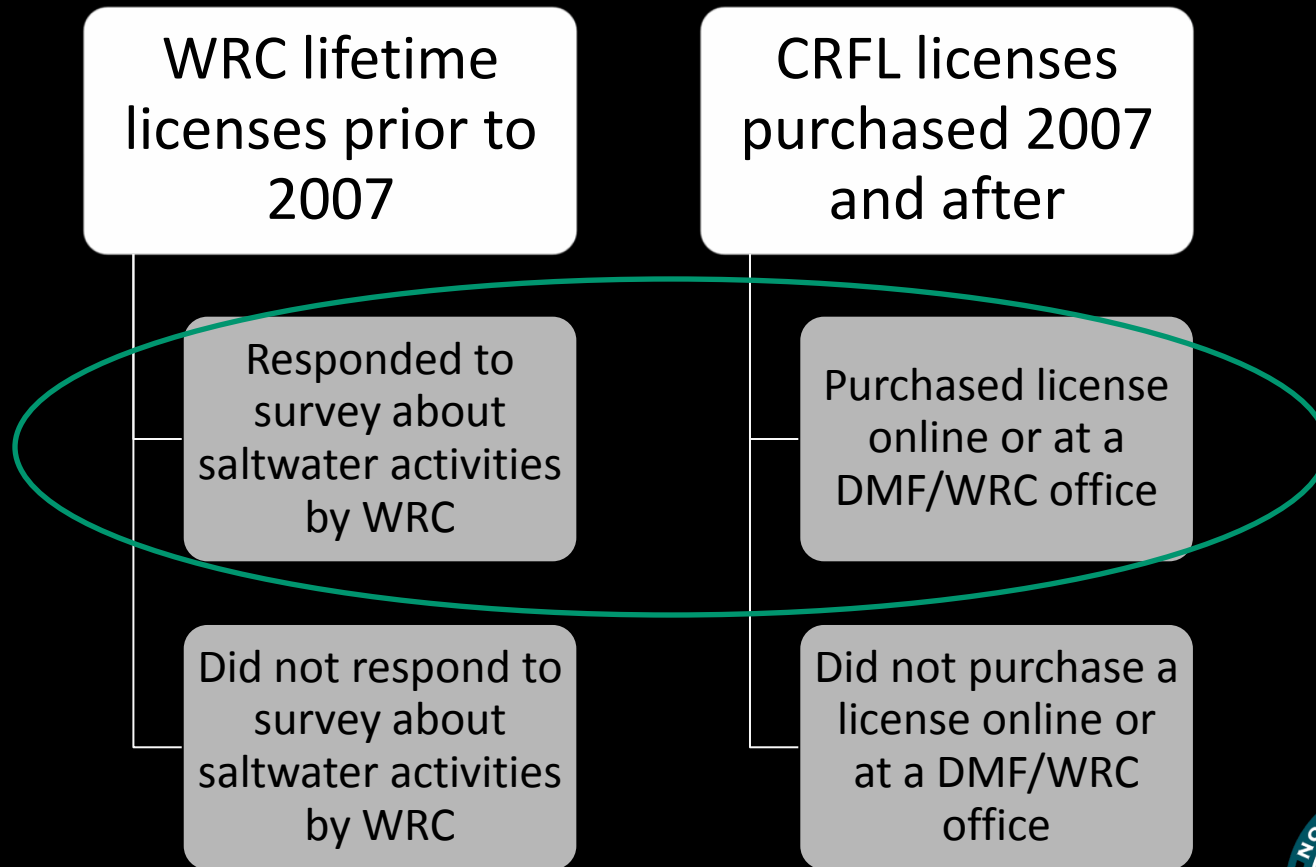
Coastal Angling Program

Survey Activity Questions

- Flounder gigging
- Harvesting shellfish
- Harvesting crabs
- Use of castnets/seines



Types of Licensees in CRFL Database



Coastal Angling Program

Flounder Gigging Survey

- July 2010 through June 2011
 - Every 2 months
 - Survey 1,300 anglers
- July 2011 through present
 - Every month*
 - Survey 650 anglers
 - Decrease potential recall bias

*Still report estimates in waves



Phases of Survey Communication*

Phase 1 – Pre-notice

Sent 1st week of the month

Entire sample



Phase 2 – Paper Survey

Sent 10-14 days after pre-notice

Sample yet to respond by internet



Phase 3 – Reminder/Thank you Postcard

7-10 days after paper survey

Random half of sample of those who have not responded to survey at time

*As recommended by Dillman, et al “Internet, Mail, and Mixed-Mode Surveys”



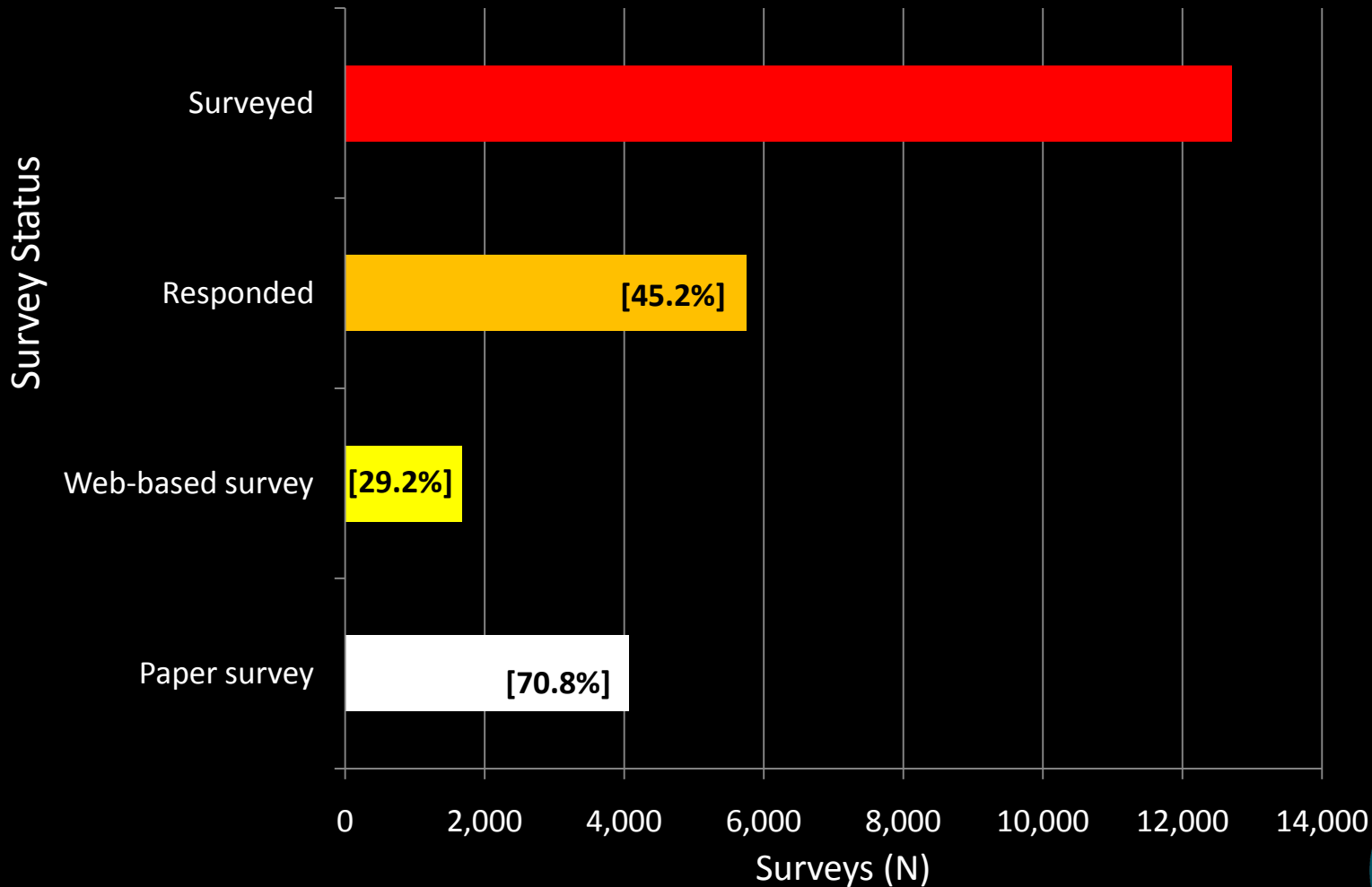
Coastal Angling Program

Flounder Gigging Survey

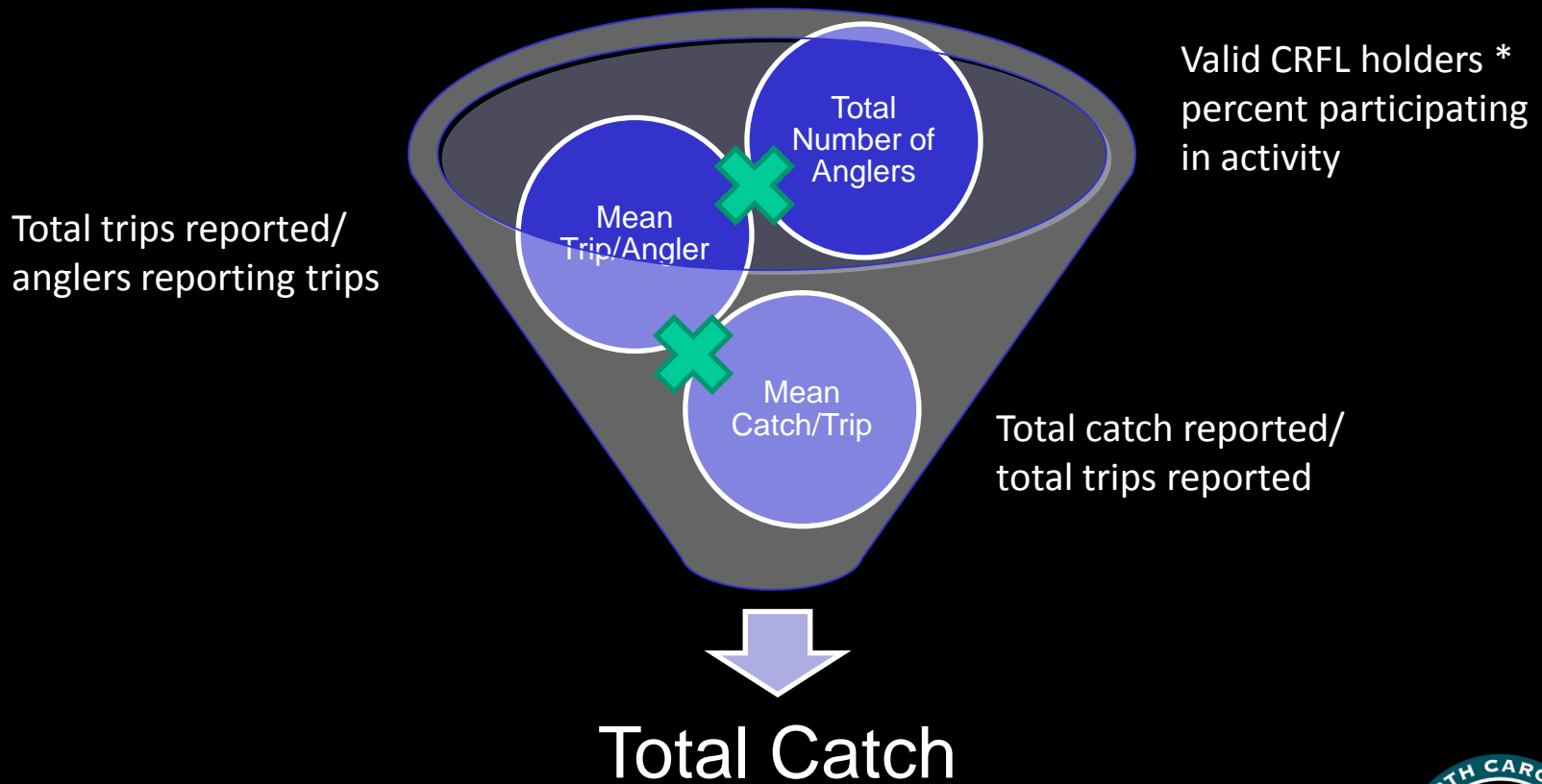
- Data elements captured
 - Methods of gigging
 - Access points & location
 - Frequency of trips
 - Amount of catch/discard
- Option to answer by web-based or paper survey



Status of Flounder Gigging Mail Surveys, July 2010-December 2011



Gigging Estimates



Gigging Estimates 2011

Wave	Total Effort (N)	Total Flounder Kept (N)	Total Flounder Discarded (N)	Total Flounder Gigged (N)
January-February	6,374	26,278	3,841	30,119
March-April	7,966	17,965	6,400	24,367
May-June	20,153	51,137	14,934	66,072
July-August	38,062	82,457	50,403	132,862
September-October	51,793	69,384	16,354	85,739
November-December	32,514	68,649	64,930	133,579
Total	156,862	315,870	156,862	472,732



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Shellfish/Crab Survey

- Every month since December 2010
- Catch/effort estimates for
 - Oyster
 - Clams
 - Crabs
 - Scallops (when applicable)
- Two phase process
 - No reminder postcard



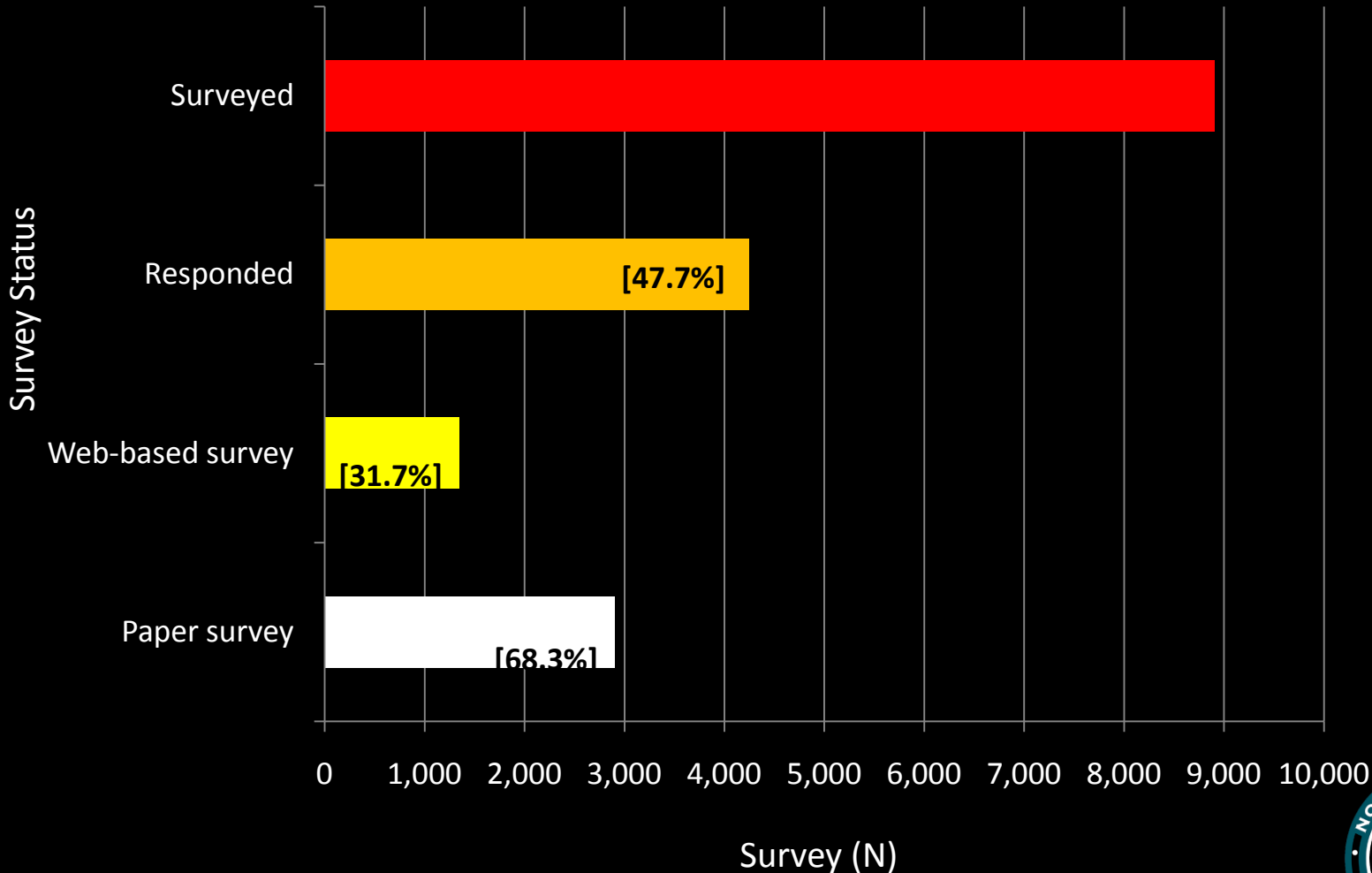
Coastal Angling Program

Shellfish/Crab Survey

- Data elements captured
 - Gear
 - Access points & location
 - Frequency of trips
 - Amount of catch/discard
- Option to answer by web-based or paper survey



Status of Shellfish/Crab Harvesting Mail Surveys, December 2010-December 2011



Coastal Angling Program

Castnet/Seine Survey

- Every month since November 2011
- Two phase process
 - No reminder postcard
- Data elements captured
 - Access points & location
 - Frequency of trips
 - Amount of catch/discard
- Option to answer by web-based or paper survey



In the process of building the data entry module to enter non-deliverables and paper survey responses.



Coastal Angling Program

Strengths

- Provide data on activities not traditionally studied
- More cost effective than intercept sampling
- Better responses than traditional phone surveys
- Opportunity to make frame more efficient



Coastal Angling Program

Potential Weaknesses

- Recall bias
 - Decrease time between event and reporting
- Non-response bias
 - Explain that responses help us update our records (saliency)
- Efficiency of frame
 - Continual update WRC with new information
 - Remove those who do not participate completely from frame



Questions?

[Link to Survey](#)

